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Factoring in Consumers' Perspectives on Regulation for Nursing Competence

An Evidence-Based Approach to Decision Making

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This paper evolved from research conducted in 1999 and 2000 under the direction of the Alabama Board of Nursing's Committee on Continuing Competence and Continuing Education. Findings from the first component of the project were presented at the Annual Meeting of the 1999 National Council of State Boards of Nursing, Inc. Educational Sessions in Atlanta, Georgia, and was entitled Consumers Perceptions of Competence in Nursing. Presenters at that meeting were Jean B. Mann (Lazarus), EdD, RN, Anne Permaloff, PhD, and Gregory Howard, LPN. Special acknowledgement is given to Jerry Ingram, PhD of Southeastern Research for data collection and analysis.

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The Board authorized the second component of the research project in 1999. Findings were presented at the American Nurses' Association Educational Sessions in the year 2000. The principal investigators for the project were Jean B. Lazarus, EdD, RN, Anne Permaloff, PhD, and Charlie Jones Dickson, EdD, RN, FAAN. Members of the Continuing Competence and Continuing Education Committee (2000) were actively involved in the design of the project, instrument validation, and graphics.

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Background

From the outset of Alabama's mandatory continuing education (MCE) program across professions in 1989, the Alabama Board of Nursing (hereafter referred to as the Board) conducted annual assessments to determine compliance with the regulations set forth by the Alabama Legislature in 1989. Additionally, the assessments provided insight into programmatic issues that led to amendments in regulations in succeeding years (*Code of Alabama, 1975*, § 34-21-23 and Act 89-243. History: Effective September 29, 1989. Amended March 22, 1991. Filed May 29, 2001. Effective July 2, 2001).

In 1997, evaluation of the continuing education program was initiated through formal research methods to determine licensees' perspectives on reasonableness, access and value of the CE program (Lazarus, Permaloff, & Dickson, 2002). While in the process of gathering data from licensees, the Board, in 1998, expanded its focus to other issues of competence, as related to the statute requiring the adoption of "standards for registered and practical nursing practice and for continued competency of licensees..." (*Code of Alabama, 1975*, §34-21-26 (21).

The Board developed a position paper (1998) that entailed (1) factors in regulation relative to public safety and welfare, (2) assumptions about continuing education and continuing competence, and (3) a plan to determine critical factors in regulating for continued competence in nursing. An Accountability Model for Competent Nursing Practice was developed in 1999 to serve as an organizing framework for nursing regulatory agencies in promoting nursing competence. (See Figure 1). The consumer was the designated focus of the model with all other components assuming accountability for assuring public safety and welfare in the execution of their respective roles. Assumptions, established in 1998 by the Board about responsibility and competence for nursing practice, framed the research projects that the Board executed with primary focus on the consumer. (Appendix A)

An evidence based research project was initiated that incorporated the licensee study on access, reasonableness and value, with new studies involving nursing competence and regulation issues as perceived by consumers, nursing organization leaders, nursing educators and practicing nurses. Regulations for continuing education were amended over a four – year period as research findings provided consumer driven evidence that supported decision making to facilitate competent practice. (*Code of Alabama, 1975*, § 34-21-23 and Act 89-243. History: Effective September 29, 1982. Amended March 22, 1991. Filed May 29, 2001. Effective July 2, 2001. Repealed and Replaced: Filed September 27, 2004. Effective November 1, 2004).

Accountability Model for Competent Nursing Practice:

An Organizing Framework

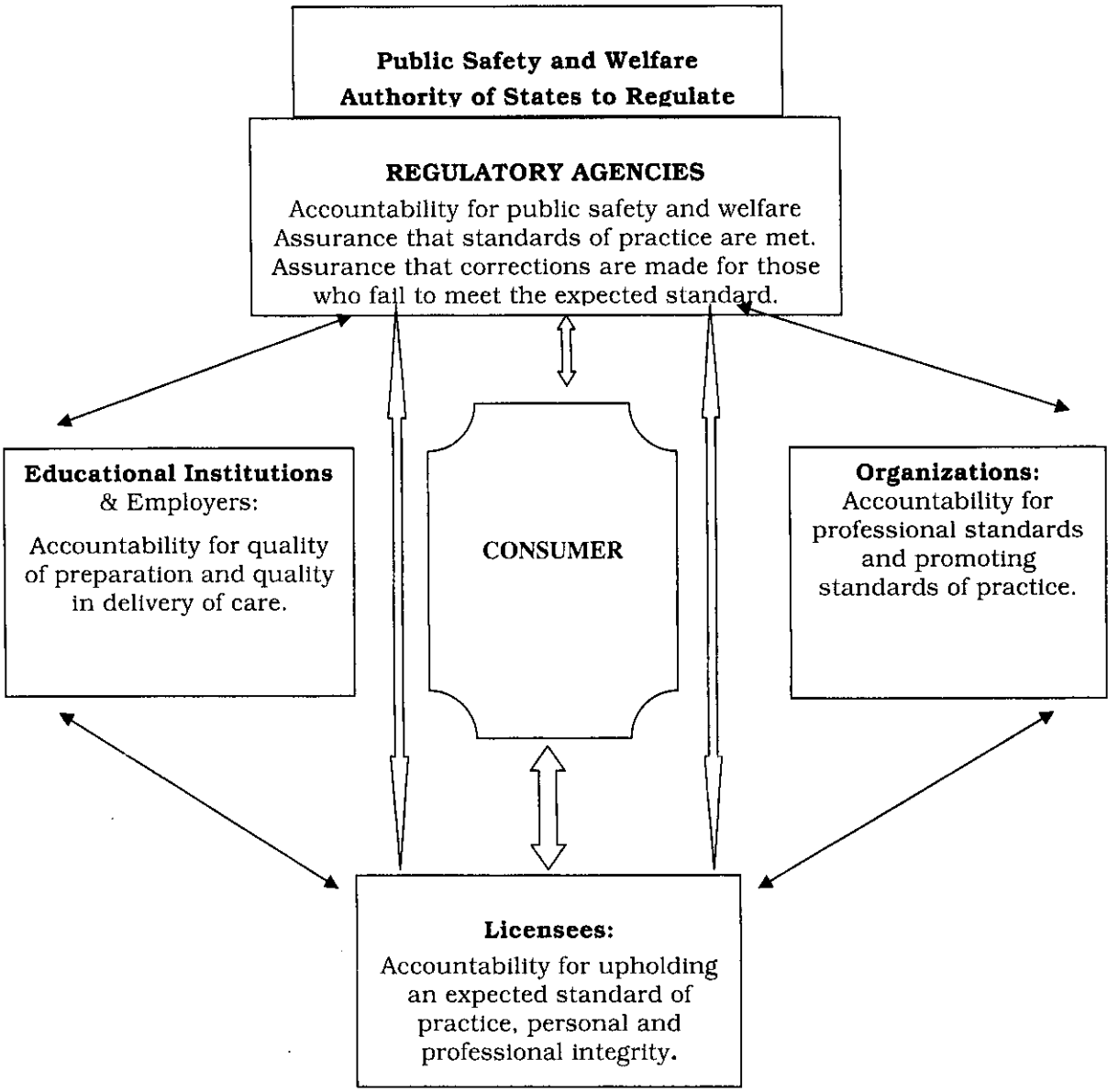

Figure 1. Alabama Board of Nursing Accountability Model for Competent Nursing Practice

Six years of study and research on matters of government, regulation, and accountability to the public and nursing competence are culminated in this paper. First, background information regarding consumers' rights, issues relating to competence and matters pertaining to governments and regulation, in general, is provided. Next, an overview of selected research, theory, concerns and models on competence and regulation provides information about complexities involved in measuring and regulating for competency. Third, a summary of published findings are integrated from the study involving licensees' perceptions of reasonableness, access and value of the Board's mandatory continuing education program (Mann, Permaloff, & Dickson, 2002). Last, research findings are presented that evidence critical factors in measuring competence of nurses as identified by consumers, and rated by licensees, nurse educators and nurse leaders of organizations with vested interest in nursing. Implications for implementing an accountability model for competent nursing practice on regulatory bodies are synthesized, and a summary of progress in implementation of the model is presented.

Consumers and Competence

Consumers

Consumers are users of products and services, including health care services. They are "people who are affected by pricing policies, credit reporting, debt collection and other trade practices for which state and federal consumer protection laws are enacted," (Black, et al., 1990). Prior to the second half of the twentieth century, respect was more often placed on those providing healthcare services, while the purchaser, the consumer had little input into the decisions affecting their health and lives.

In the early 1960's, a gradual upsurge of interest in human rights began when President John F. Kennedy gave a message to Congress that included four basic human rights: right to safety, right to be informed, right to choose and right to be heard. From this point numerous government and private sponsored councils, conferences and commissions have been convened to address consumer protection and quality in the health care industry (Mann, et al., 1999).

In the latter part of the twentieth century issues of competence in health care spiraled as concerns for consumer safety were magnified under studies and conferences funded by the Pew Commission. (Pew Health Professions Commission. (1995); Pew Health Professions Commission. (1998)).

Use of the term "consumer" in health care implies an interactive relationship for mutual expectations and outcomes, such as safe and competent care. Even with all of the data amassed in regard to consumer rights, the enumerable factors affecting health care delivery, e.g., professional territoriality, insurance limitations, government policies in matters of privacy, qualifications of practitioners, and accessibility, seem to diminish any opportunity for interactive relationships for the consumer. The term "patient" still seems to dominate the health care industry. In this, the individual called a "patient" assumes an affected role: the semantic role of an entity that is not the agent but is directly involved in or affected by the

happening denoted by the verb in the clause. From a more archaic perspective, the patient is "enduring without protest or complaint" (2005; wordnet.princeton.edu/perl/webwn).

Competence and Competency

Definitions of competence and competency are numerous, often overlap in concepts and outcomes, or simply are designated as synonyms. Major concepts for competence are found in Web cited sources. Some are included here as quotations because these concepts are found in definitions adapted by various professions and businesses for standards of practice. Physical and mental ability, skills, power and authority to perform seem to permeate the definitions (http://www.answers.com/competency&r=67).

From The American Heritage® Dictionary, competence is defined as, "Physical, mental, financial, or legal power to perform: ability, capability, capacity, competence, faculty, might..." "Conferred power: authority, faculty, mandate, right. .."

A legal dictionary definition of competency is found in the Merriam-Webster's Dictionary of Law 1996. Merriam-Webster's, Incorporated. Here competency is described as a noun and cites State v. Scoggin, 72 S.E.2d 54 (1952)) "The quality or state of being mentally competent."

WordNet 1.7.1 (2001) by Princeton University also describes competency as a noun with the following meaning: "The quality of being adequately or well qualified physically and intellectually..."

Nursing Competence/Competency

In nursing, input has been obtained from a plethora of resources to incorporate various concepts into definitions of competence that have both professional and legal credibility. While not focusing specifically on definitions, various resources brought to fore the need for professional and legal means of assuring public safety. Among earlier efforts, federally sponsored manpower projects spurred the development of mandatory continuing education as a means of promoting continued competence across professions (Schmitt, Shimberg, (1996) in Whittaker, Smolenski. & Carson, June 30, 2000).

In May 1999, the American Nurses Association Board of Directors appointed an expert panel whose charge was to develop policy recommendations and an action plan with a proposed research agenda regarding continuing competence. The Panel had representatives from the American Nurses Association; the American Nurses Foundation; State Nurses Associations; American Nurses Credentialing Center; the Nursing Organization Liaison Forum; American Academy of Nursing; and the National Council of State Boards of Nursing. During their meetings, the Expert Panel formulated these definitions:

- Continuing competence is ongoing professional nursing competence according to level of expertise, responsibility, and domains of practice.

- Professional Nursing Competence is behavior based on beliefs, attitudes, and knowledge matched to and in the context of a set of expected outcomes as defined by nursing scope of practice, policy, Code for Nurses, standards, guidelines, and benchmarks that assure safe performance of professional activities.
- Continuing Professional Nursing Competence is ongoing professional nursing competence according to level of expertise, responsibility, and domains of practice as evidenced by behavior based on beliefs, attitudes, and knowledge matched to and in the context of a set of expected outcomes as defined by nursing scope of practice, policy, Code of Ethics, standards, guidelines, and benchmarks that assure safe performance of professional activities (American Nurses Association, 2000 in Whittaker, et al., June 30, 2000).

The National Council of State Boards of Nursing, in its participatory efforts of representing its 56 states and territories, engendered studies on competence and continued competence across three decades. The Council's definition of competence is published as "the application of knowledge and the interpersonal, decision-making, and psychomotor skills expected for the nurse's practice role, within the context of public health, welfare and safety," (National Council of State Boards of Nursing (1997) in Sheets, 1999).

Various states adopted definitions of competence and competency. In Alabama, the following definition (1998) has been used as a foundation for addressing matters of competence from a legal, accountability perspective: "competence is the possession of knowledge, attitudes and skills necessary to meet a certain standard of practice."

Regulation and Public Safety

Government in General

A government (from the Greek kubernites - steersman, governor, pilot, or rudder) is an organization that has the power to make and enforce laws. While there are various forms and theories proffered for the establishment of such an organization, the focus here is on the democratic form of government and the social contract theory. (Wikipedia, 2005).

This theory holds that governments are created by the people in order to provide for collective needs (such as safety from crime) that cannot be properly satisfied using purely individual means. Governments thus exist for the purpose of serving the people, through a clearly stipulated "social contract." Such contracts usually achieve form through a constitution and a set of laws by which both the government and the people must abide. The Tenth Amendment of the Constitution of the United States provides for states to enact reasonable laws and exercise police power to protect its citizens (Sheets, 1996).

> "The powers not delegated to the United States by the Constitution,
> nor prohibited by it to the states, are reserved to the states respectively,
> or to the people." (*U.S. Constitution*, "Amendment X")

The enactment of such laws is typically accomplished through administrative codes that set down regulations authorizing and empowering a governmental body to take steps necessary to protect the public from unscrupulous practitioners (Mann [Lazarus], Permaloff,, Howard, Albert, Dickson, Scharath,, & Sewell, 1999).

Regulation and Competence.

In performing its regulatory function a state may grant to professions/occupations a degree of self-regulation on the assumption that each profession will develop appropriate ethical and competency standards. This assumes that the profession will require a higher standard of practice and ethical behavior of its members than is required by society in general, particularly when the profession's practice encroaches upon the public's physical, mental or economic well being.

A proactive approach for assuring competence for initial entry into practice has been in effect in most states for almost a century through "Nurse Practice Acts." These laws provided, and continue to do so, for regulations requiring satisfactory completion of a prescribed educational program of didactic and clinical study, followed by passing a comprehensive examination after graduation in order for individuals to be licensed to practice.

Initially, nurses were expected to maintain competency as part of their professional role. As, however, health care sciences became more diverse and complex, public and professional concerns emerged about incompetent practice. Although state governments have always carried a charge for public safety, the public through various interest groups and litigation, has brought pressure on the health professions' regulatory bodies to promote and insure continued competence of licensees. Assuring continued competence has first, been reactive primarily by executing disciplinary action on those individuals whose practice failed to meet an established standard. A more deliberate approach to promoting continued competence was initiated in the 1970's with the first efforts at mandating continuing education for physicians and nurses.

Boards of nursing have adopted standards of practice and continuing education models in efforts to promote continued competence of licensees. Such models have been criticized for their limitations in assuring competence and fueled concerns of state and national levels about competent practice, competency of practitioners and the role of regulatory agencies in assuring public protection. Del Bueno at the Nursing Futures and Regulation Conference stated "it's not that we ought to ensure it, it is how we ensure it," (November 6, 1997).

There are numerous complexities in the implementation, development and maintenance of a program for continued competence, even if it includes only mandatory continuing education. Continued competence analysis and evaluation merits considerable attention to implementation and maintenance issues. Among the most challenging are structural matters such as assuring economic support for administration, manpower for implementing the various components of the program, and accessibility to resources that can provide support for program implementation. Further, there are ethical-legal elements to be

integrated such as limitations of authority, and power to enforce regulations; morale issues, interagency coordination, usefulness, and value directed to the principle of public protection. Programmatic implementation issues must also be resolved. Those that follow should be given considerable attention:

- Content requirements given the multiplicity of nursing roles and settings where nurses practice;
- Process to be used in regulating for practice;
- Determining evaluators for measuring competence;
- Determining measurement methods and expectations;
- Management of threat issues for practitioners and Boards particularly in matters of encroaching on property rights; and
- Potential effectiveness of the selected approach or approaches for assuring continued competence.

Measuring for Outcome of Continuing Education

Continued competence, by nature of its various definitions, defies measurement of value by quantification alone. When considering continuing education and its impact on continued competence, some studies involving complex statistical analysis yielded positive findings. Waddell (1991) conducted a meta-analysis of 34 studies on continuing education, and drew the conclusion that it has a positive effect on nursing practice. Further, Umble and Cervero (1996) in a critique of 16 research syntheses on impact studies of CE, commented that continuing education is, "in general, effective at improving knowledge, competence, and performance on patient outcomes."

As a measure of quality control, the Alabama Board of Nursing subjected the regulations for mandatory continuing education (MCE) for licensure to evaluation by a random sample of registered and licensed practical nurses 1997-1998. There were 406 respondents of 600 sampled (255 registered nurses and 146 licensed practical nurses). The margin of error range for the total population was estimated at between four and five percent. The purpose was to evaluate the MCE program for reasonableness, access and value.

The majority of the participants in the study indicated that they perceived continuing education to be of value and contributed positively to their practice and the practice of others in one or more areas. Concerns were expressed about accessibility of programs, quality of programs, costs and unavailability of courses during hours that are convenient for selected populations, particularly licensed practical nurses. Attention was also drawn to a need for additional hours for independent study. Further, attention was drawn by some respondents to issues of honesty in reporting by some licensees (Lazarus, Permaloff, & Dickson, 2002).

Since completing the study, the Board used findings as evidence to amend the regulations, e.g., to increase hours allowed for independent study, intensify auditing methods, and tighten reporting methodologies. Further, the Board has begun offering continuing education programs that are more accessible by electronic means. (*Code of Alabama, 1975*, §§34-21-2, 34-21-23(f); *Administrative Code* Chapter 610-X-10).

Measuring for Continued Competence/Competency

The effectiveness of mandatory continuing education regulations must ultimately be measured in the practice arena. Herein lays the challenge. Regulatory agencies must not only measure the effectiveness of regulations from an operational perspective within the agency, but must also seek evidence that provides assurance that licensees are competent beyond entry into practice. Waddell (2001) reaffirmed that definitions of competence are numerous, but notes that none are operational. To measure a concept requires considerable conceptualization that can be pragmatized into operational means. Measurement issues involved in assessing competence include selecting an appropriate measurement paradigm, selecting accurate measurement instruments, and interpreting the measurement data (Waddell, 2000).

Some states have developed continuing competence models and/or have verification requirements for continuing competence. Among those are Mississippi, Tennessee, Kentucky, and South Carolina. Kentucky's model incorporates competency validation options. One of the options along with 30 contact hours MCE allowed for an employer evaluation. None of these, however, identified competency indicators relative to standards of practice (McGuire& Weisenbeck, 2001).

Mississippi's Competency Model (2002) charts nursing competencies based on educational preparation. It was developed to help with workforce issues at a time of nursing shortage. The model is referenced along with South Carolina's in the Tennessee model. While establishing role differentiation that may serve as a basis for evaluating competencies of individuals in the expected role, it does not delineate a plan to evaluate competencies. Tennessee has a verification process for continued competence, and clearly establishes that continued competence verification is dependent upon adherence to practice standards (Announcement – Tennessee Board of Nursing, 2002; http://www2.state.tn.us/health/Boards/Nursing/continuing.htm.).

Research for Competent Practice through a Consumer Based Paradigm

As stated in preceding paragraphs, the consumer is the focus of the Accountability Model of Competent Nursing Practice. Boards of Nursing are accountable for assuring the standards of practice are clearly stated and disseminated to all parties with vested interest. Boards are further held accountable for assuring that standards of practice are met in the interest of public safety and welfare. This entails proactive and interactive relationships with providers and leaders in health care delivery, educators, leaders in nursing and other health care organizations and licensees. Critically, it imposes upon the Board a direct relationship with consumers of care. Each entity, regulatory boards, licensees, educators, professional organizations and providers of health care, is perceived as upholding an ethical and professional mandate of accountability for assuring competent practice to the benefit of public safety and welfare. Research among these factions has provided a paradigm for measuring entry level and continued competence.

In 1999, the Board authorized research to measure nursing competence as perceived by consumers of healthcare in Alabama (Mann (Lazarus), et al., 1999). Funds were initially

approved through the Legislative review process. Additional funds were approved through State administrative channels. Both qualitative and quantitative research methods were employed to meet the research objectives. Qualitative processes involved obtaining data from a focus group of 12 men and women, across adult age groups, heads of household and fiscally responsible residents of metropolitan and rural areas around Montgomery, Alabama. An interview guide was used to generate discussion about the project's purpose and to identify attitudes and attributes/indicators about nursing competence and ways and means of assuring competent nurses. Their input was incorporated into the development of a questionnaire to obtain data from the study population by telephone interviews. Content for the questionnaire and the format were validated by outside reviewers.

The survey sample consisted of a random, digit dialed, statewide sample of 600 adult heads of households in Alabama with no nurse or nurse aide in residence. The margin of error due to sampling for the survey was +/- 4.0 percentage points at the 95 percent confidence level. (See Appendix B for demographic data.)

Findings

Attributes of Competent Nurses as Identified by Consumers (N =600)

Findings were numerous, but for purposes of this paper, three are essential. Consumers clearly stated that entrance into practice required competency demonstrated through a formal educational program that included training on equipment and medication, and passing a licensing examination. The participants were asked if competency of nurses should be demonstrated periodically to maintain a nursing license, or if the license should be "good for life." Three percent (3%) (n = 18) were undecided. Only eight percent (8%) (n = 48) indicated that "good for life" license was adequate to demonstrate nursing competence. A resounding 89% (n = 536) said competency should be periodically examined. Consumers recommended continuing education, job evaluations and testing as potential means of measuring continued competence.

The third essential set of findings relates to the consumer's perceptions of attributes that consumers identified as significant ("very important") indicators of a competent nurse or competent nursing practice and a desired level of performance. They further rated the actual perceived performance from their personal experiences in health care situations. These are aggregated in Table 1.

Table 1. Consumers' Identified Desired Attributes for Competent Nurses (N = 600)

Attribute	% "Very Important" Rating
Knowing how to use equipment properly	99
Being able to handle a crisis situation	96
Communicate well with patients	94
Responding to the needs of patients' quickly	92
Being confident in the way they do their job	92
Caring attitude	91
Good attitude	90
Being courteous	88
Going about their job in a professional manner	88
Knowledge necessary to provide patients with reliable healthcare information	87
Treating all patients the same	85
Working well with other health care professionals	83
Neat, clean appearance	83
Good bedside manner	81
Showing respect for patients' privacy	80
Knowing the needs of patients' families	56

Ninety percent (90%) or greater of the participants identified the following as very important attributes of a competent nurse: knowing how to use equipment properly (99%; n = 594), being able to handle a crisis situation (96%; n = 576), communicate well with patients (94%; n = 564), responding to the needs of patients' quickly (92%; n = 552), being confident in the way they do their job (92%; n = 552), and having a caring attitude (91%; n = 546).

Eighty percent (80%) to 90% of the participants designated the next eight attributes as very important: "good attitude" (90%; $n = 540$), "being courteous" (88%; $n = 528$), "going about their job in a professional manner" (88%; $n = 528$), "having knowledge necessary to provide patents with reliable health care information" (87%; $n = 522$)," treating all patients the same" (85%; $n = 510$), "working well with other health care professionals" (83%; $n = 498$), "demonstrating a good bedside manner" (81%; $n = 486$), and "showing respect for a patient's privacy" (80%; $n = 480$). The last attribute identified as desirable and designated as "most important" by 56% ($n = 336$) of the participants was "knowing the needs of patients' families."

The study group of consumers was asked to rate the quality of care they received by Alabama nurses in their most recent experiences. Close to 30 percent ($n = 172$) rated the overall quality of care as excellent, while another 57 percent ($n = 342$) considered the quality of care to be good. The remaining 13% ($n = 78$) indicated that they experienced poor nursing care. The attributes that were identified by consumers as very important served as the foundation for the instrument developed for the final phase of research to determine critical factors in measuring nursing competence.

Comparative Perspectives on Attributes of the Competent Nurse

Research Questions

Notwithstanding the well published crises in health care delivery such as manpower shortages and high costs of medical care, providers and regulatory agencies are still accountable for assuring consumers of safe care. In the Accountability Model for Competent Practice, all parties with vested interest have a responsibility to assure that the consumers' rights are met. It stands to reason that those who provide a particular service should, under reasonable circumstances, be in harmony with the consumer's expectations for competent health care delivery. So, with the identification of critical factors (attributes, competencies) identified by the consumer, the following research questions were asked:

- Are these factors (attributes, competencies) viewed the same across groups: consumers, licensees, educators, organizational leaders?
- What mechanisms may be used promote competence?
- What factors influence competence?
- Does continuing education contribute to competence in nursing practice?
- Is continuing education adequate for assuring continued competence?
- In what circumstances should limitations (if any) should be placed on licensure as related to competence and public protection? What limitations?
- What major challenges or issues must be addressed to implement an accountability competence model?

Study Sample

The study sample consisted of a representative sample of consumers, licensees, nursing education leaders and health related organization representatives. Demographic

data are included in Appendices B, C, D, and E. Two focus groups were held to obtain input prior to development of data gathering instruments. The first was for consumers as previously described. The second focus group was held during a Board sponsored Summit Meeting in 1999. At this meeting input was invited from educators, agency representatives and licensees. Table 2 provides a list of the participants.

Table 2. Groups and Numbers of Study Participants (N = 1,127)

Group	*n*
Consumers	600
Registered Nurses	273
Licensed Practical Nurses	190
Nursing Education Leaders	34
Health Related Organizational Leaders	30

A total of 1,127 individual comprised the study's populations. Licensees, educational leaders and organizational leaders were represented by a number of sub categories and are described below.

- Consumers ($N = 600$; Margin of error +/- 4%);

- Licensees (N = 463 of 1,400 randomly sampled Registered Nurses (RN) and licensed practical nurses (LPN). Total population at the time of the survey was approximately 60,000 nurses holding Alabama licenses). For RNs the error rate was just under six per cent (6%) and for LPNs the error rate was slightly over seven percent (7%). In several analyses the error rate was actually less than five percent (5%).

- Educational Leaders: (N = 34 respondents from 53 programs administered by 48 individual administrators. Of the 53 programs there are 23 LPN preparatory programs, 30 RN programs (13 offer the baccalaureate degree in nursing and 17, the associate degree in nursing). All responding representatives possessed Masters' or Doctorate degrees (70% program administrators). This group was not randomly selected and was treated as a focus group in analysis). Three educators assisted in instrument validation.

- Representatives from Health Related or Vested Interest Organizations: (N = 30). Of the 30 representatives, two were non nurses. This group was not randomly selected but participated by invitation: (1) Eight of the agencies were professional

associations, one home care agency, two education agencies, one private education, two consumer groups: Department of Senior Services and American Association of Retired Persons; (2) Hospital (nursing care or patient care administrators); and (3) Continuing Education leaders.

Instruments and Processes

Written questionnaires were administered to each group. The questionnaires were content validated by the members of the Board's Committee on Continuing Education and Competence, as well as other Board staff members who were familiar with the project goals and terminology. A code book for data analysis was developed that assured confidentiality for individual participants and all organizations. Quantitative data were electronically tabulated; qualitative data were entered by clerical staff, however, names of participants were protected by numerical codes.

Findings

Graphic Comparison of Responses from Study Participants

The sixteen desired attributes for competent nursing, as identified by a random sample of 600 head of household consumers, are individually presented in graphic format. The percentages of each of the other groups' responses provide a pictorial accounting of likenesses and variance among the groups (Figures 2-16), relative to the significance each group placed on a particular attribute. In-text numbers are rounded to the nearest whole.

Figure 2 shows percentages of participants who rated the attribute that the consumer population considered to be most important "knowing how to use equipment properly" (99%; n = 594). In dialogue, consumers said, "There are some givens. Nurses who do not know how to use equipment properly are not safe..."

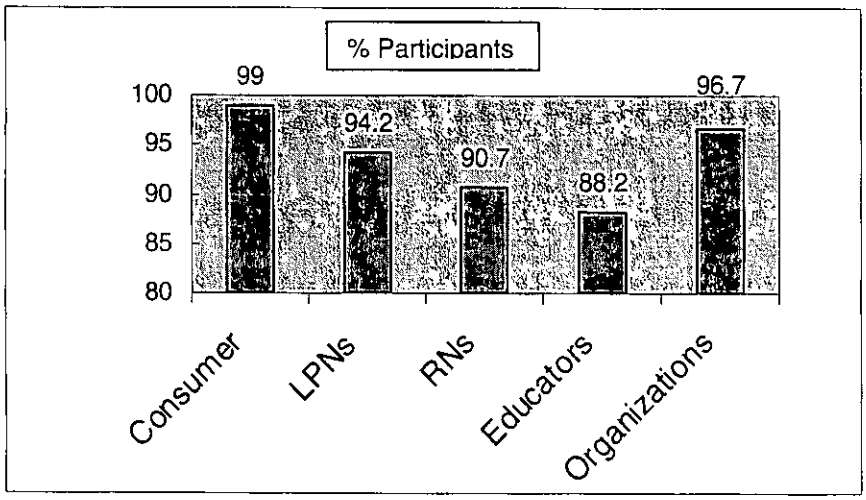

Figure 2. Percent of study participants' who rated "Knowing how to use equipment" as "Very Important." for competent nursing practice.

Given the charge for public safety, one might anticipate that this attribute would be held in esteem in a highly technical environment. The leaders of health related organizations/agencies tracked the consumers' interest most closely with a 96.7% (n = 29) response. They were followed reasonably close with a 2.5% difference, by LPNs (94.2%; n = 179). Registered nurses dropped considerably with a near 10% difference from the consumer (90.7%; n = 248), and educators fell further from the consumer respondents by 11.2% (88.2%; n = 30).

The second attribute, "being able to handle a crisis situation," was rated "very important" by 96% (n = 576) of the consumers (Figure 3). It was noted that most of the organizational leaders were educationally prepared in clinical nursing but held positions that focused primarily on administrative functions in health care delivery.

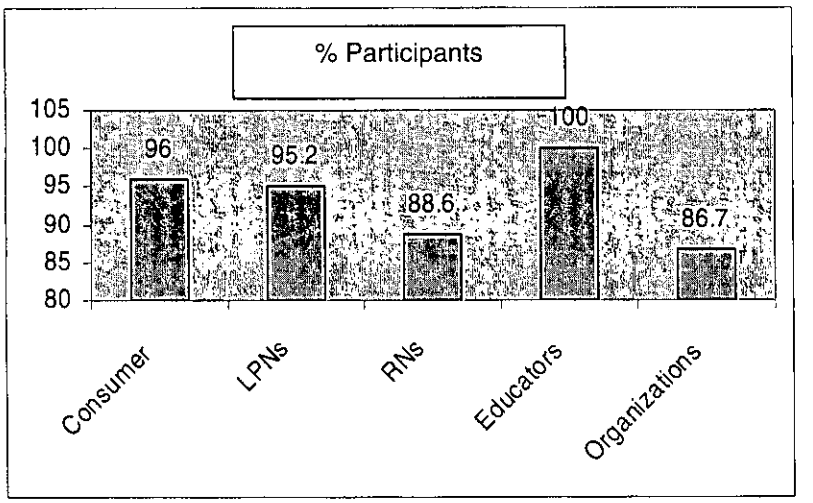

Figure 3. Percent of study participants' who rated "Being able to handle a crisis situation" as "Very Important" to competent nursing practice.

One-hundred percent of the responding educators said that this attribute was very important. Licensed practical nurses followed closely to the consumers with 95.2% (n = 181). Registered nurses, however, varied from the consumer by almost eighty-eight per cent (n = 242). Health care representatives of organizations/agencies dropped almost 10% from the consumers' expectations.

Obviously, this attribute held importance to all participants. Reasons for the lower percentages of "very important" assessments by RNs and organizational leaders is worthy of further study given the advanced technologies employed for in-patient and out-patient care.

Consumers' ranked "being able to communicate with patients" third in priority with 94% (n = 564). Again, RNs and representatives of organizations/agencies evidenced the greatest disparity from the consumers. (See Figure 4.) In this attribute, 94% (n = 594/600) of the consumers perceived communicating well with patients as "very important."

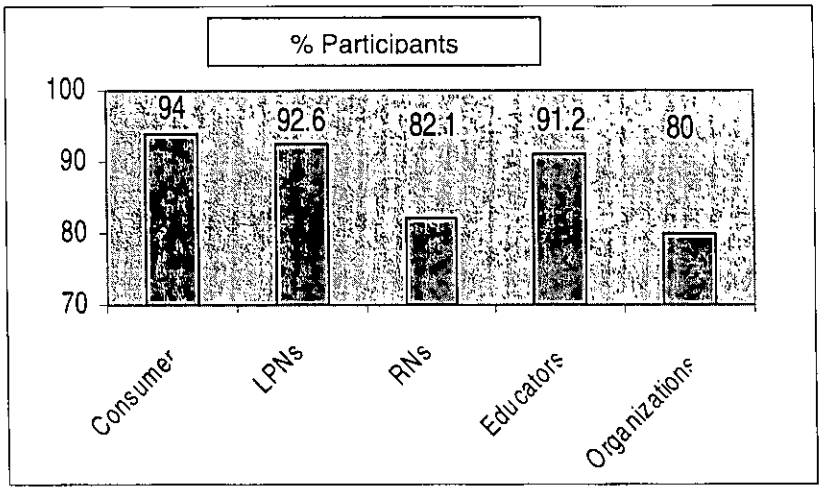

Figure 4. Percent of study participants who rated "Communicating well with patients" as "Very Important" in competent in competent practice.

LPNs, 92.6% (n = 176), and nurse education leaders, 91.2% (n = 31 corresponded closely with the consumers. Registered nurses fell almost 12% below consumers' responses (82.1%; n = 224). Eighty percent (n = 24) of the organizational representatives, indicated that "communicating well with patients" was "very important."

Figure 5 shows a considerable difference in the percent of consumers' and other participants' responses regarding the attribute "responding to the needs of patients quickly." Ninety-two percent (n = 552) of the consumers perceived this attribute as "very important."

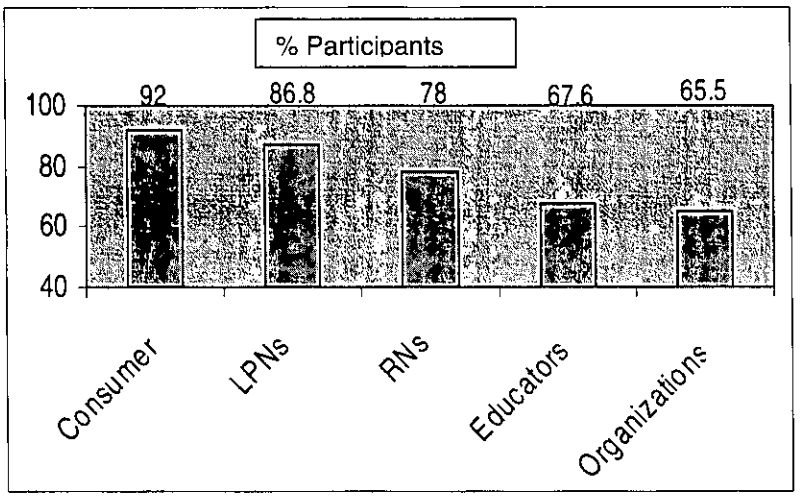

Figure 5. Percent of study participants who rated "Responding to the needs of patients quickly" as "Very Important" to competent nursing practice.

Licensed practical nurses (86.6%; n = 165/190) aligned relatively close to consumers regarding response time to patients' needs. Registered nurses (78%; n = 213/273), educators (68%; n = 23/34) and organizational representatives (66; n = 20/30) veered from consumers assessments on this attribute.

In Figure 6, 92% of the consumers (n = 552/600) established "being confident in the way they (nurses) do their job" as being "very important." This particular attribute is typically linked with self assurance, being certain and having freedom from doubt.

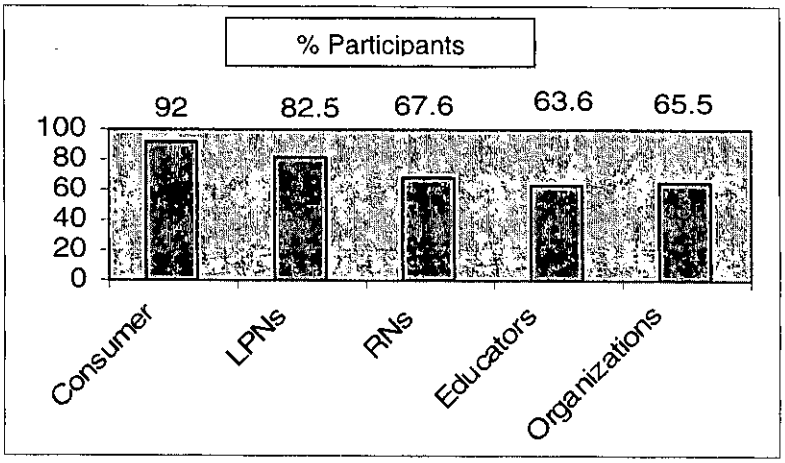

Figure 6. Percent of study participants who rated "Being confident in the way they do their job" as "Very Important" for competent nursing practice.

Consumers indicated qualitatively that they "wanted nurses to show that they are secure in what they are doing." "Makes me nervous when they act like they know what they're supposed to do." As shown, all other participants fell well below consumers in the importance of job confidence. LPNs came closest to the consumer with 82.5% (n = 157). From there, registered nurses (67.6 %; n = 185) viewed this attribute as "very important." Even lower were nurse educators (63.6%; n = 22) and organizational leaders (n = 65.5%; n = 20).

The next graph illustrates comparisons between group participants on the consumer designated attribute, "caring attitude." Attitude reflects a way of thinking or an outlook. Caring is associated with sensitivity to others' feelings. Consumers said the first priority was for nurses to know how to do their job accurately and correctly, but it helped when the nurses acted like they cared.

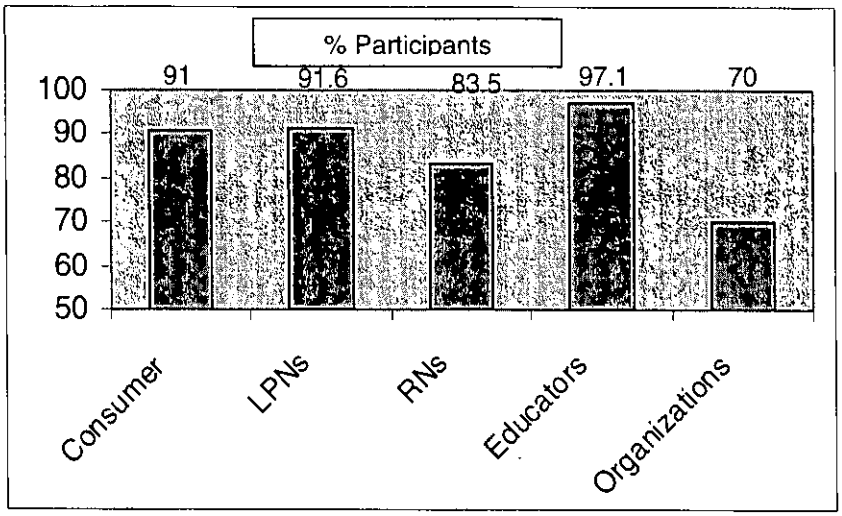

Figure 7. Percent of study participants who rated "Caring attitude" as "Very Important" for competent nursing practice.

Ninety-one percent of the consumers (91%; $n = 546$) saw a "caring attitude" as being "very important." LPNs had a similar percentage with 91.6% ($n = 174$) responding in accord with the consumers. About 97% ($n = 33$) of the nurse educator leaders rated this attribute as "very important." Registered nurses dropped below the consumers 91% with 83.5% ($n = 228$). Organizational leaders fell to 70% ($n = 21$) as seeing a caring attitude as a "very important" attribute for the competent nurse.

Figure 8 references attitude as a factor in competence. In this, 90% ($n = 540$) of the consumer participants perceived a "good attitude" as significant. This attribute, in focus groups and open ended questions, seemed to be linked with positive acting behaviors such as being to work on time, not leaving until a task was completed if it was "shift change" and not complaining about work, their co-workers or work environment.

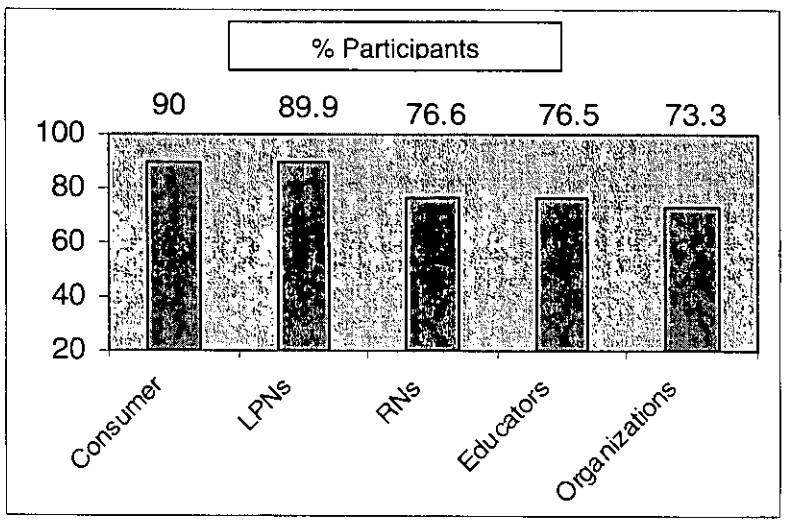

Figure 8. Percent of study participants who rated "Good attitude" as "Very Important" for competent nursing practice.

Again, LPNs identified closely with the consumers (89.90%; $n = 171$). From there the drop was considerable. About 77% ($n = 210$) of the RNs and nurse educators saw this attribute as important to nursing competence. The percentage of organizational leaders (73.3%; $n = 22$) departed approximately 17% from the consumers' assessment.

Eighty-eight percent (88%; $n = 588$) of the consumers indicated that being courteous was a desirable attribute (Figure 9). Consumers described "being courteous" as treating them with respect.

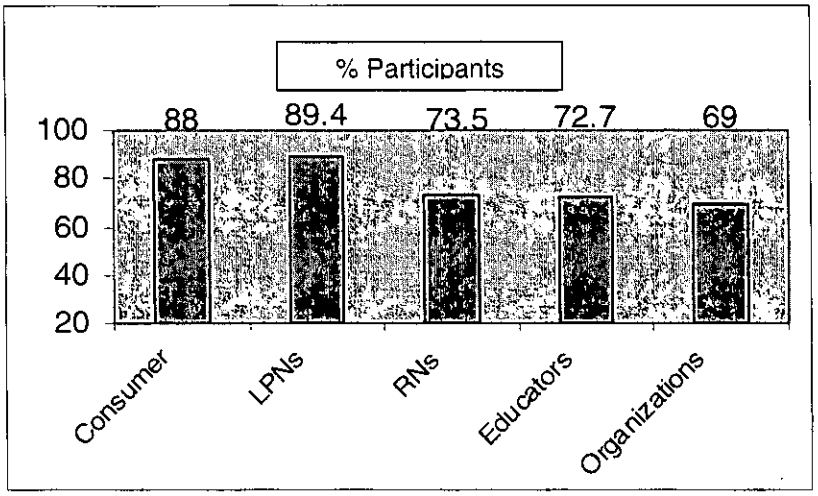

Figure 9. Percent of consumers who rated "Being courteous" as "Very Important" for competent nursing practice.

A majority of the LPNs (89.4%; $n = 170$) established "being courteous" as an important attribute for nursing competence. Once again the remaining three groups widened their responses from the consumer. The percentage of responses are respectfully, RNs 73.5% ($n = 201$); nurse educators 72.7% ($n = 25$); and, organizational leaders, 69% ($n = 21$).

Figure 10 addresses consumers' perspectives on professional demeanor. Numerous times consumers said they liked to see nurses project a positive and professional attitude. They did not appreciate casual and "sloppy" behavior, loud and offensive language. A business-like approach might best describe the preference of individuals who are seeking health care.

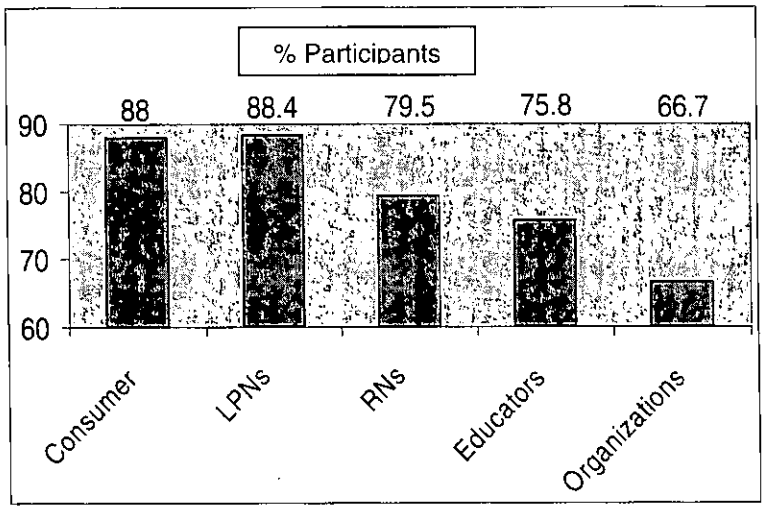

Figure 10. Percent of study participants who rated "Going about job in a professional manner" as "Very Important" for competent nursing practice.

Eighty-eight percent (88%; $n = 528$) of the consumers ranked this attribute as "very important." Licensed practical nurses were almost equivalent with the consumers (88.4%; $n = 168$). Registered nurses dropped an additional 8.5% (79.5%; $n = 217$), and education leaders dropped 12.2 % (75.8%; $n = 26$) respectively, while organizational leaders dropped by 21.3% (66.7%; $n = 20$).

Consumers (87%; $n = 522$) specified "knowledge necessary to provide patients with reliable health care information" as "very important." This particular attribute is actually spelled out in the "Nurse Practice Act" (*Code of Alabama, 1975*, Section 31-21-1). Patient teaching is a legal responsibility of the nurse, one for which they may be held accountable for competent practice. It is an independent function – not dependent upon the physician for action. One might anticipate a major identity with the consumer or even higher numbers.

While none of the provider groups exceeded the percentage of consumers, LPNs (87.3%; $n = 166$), education leaders (84.8; $n = 29$) and organizational leaders (83.3%; $n = 25$) approximated the percent of consumers. Registered nurses (77.8%; $n = 213$), for whom this attribute is a legal function, dropped 9.2% below consumers. (See Figure 11.)

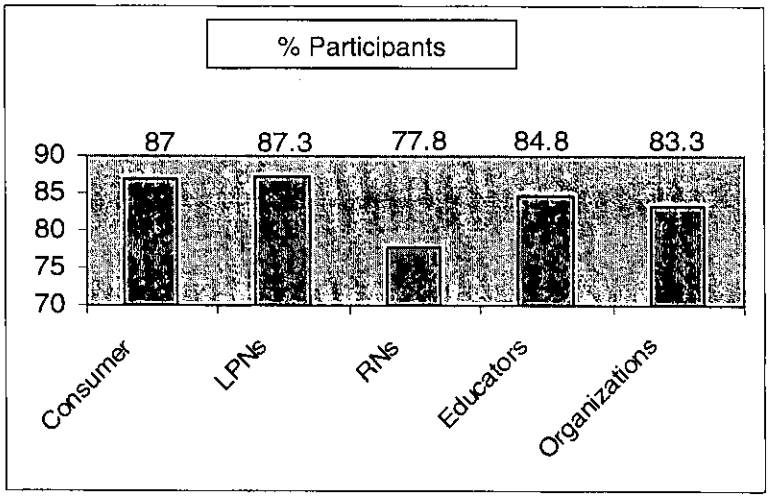

Figure 11. Percent of study participants who rated having "Knowledge necessary to provide patients with reliable health care information" as a "Very Important" for competent practice.

Many consumers described situations in which they experienced being treated differently from others. Examples were given of staff behaviors that were perceived as being discriminatory due to age, race, condition or economic situations. Consumers expressed a belief that nurses should treat all patients the same. As shown in Figure 12, other study participants fell below the consumers expressed need.

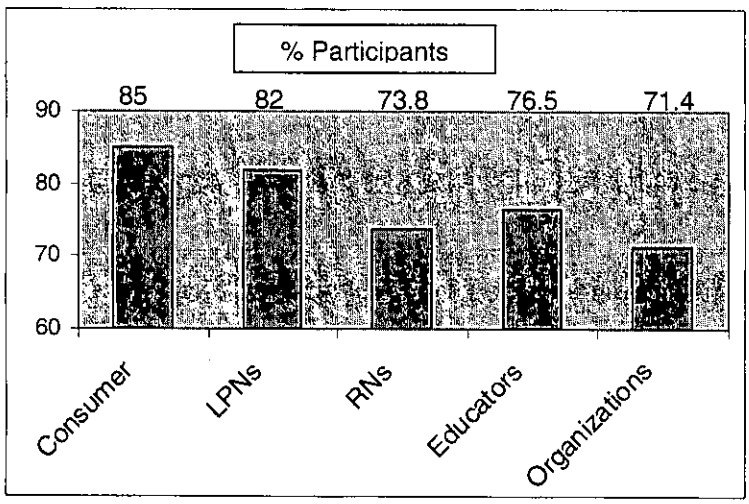

Figure 12. Percent of study participants who rated "treating all patients the same" as "Very Important" for competent nursing practice.

Eighty-five percent (85%; n = 510) of the consumers designated "treating all patients the same" as "very important." Again, the LPNs (82%; n = 156), identified closely with the consumers. Registered nurses, (73.8%; n = 199), educator leaders (76.5%; n = 26), and organizational leaders (71.4%; n = 21) followed the consumer. Qualitative responses from registered nurses indicated that they are interested in non discriminatory nursing practice, but that the nursing needs of all patients are not the same therefore cannot be treated alike. Thus, their interpretation of the question influenced their responses.

To consumers in the focus group, the major discriminatory practice by nurses was economic, not based on race or age or condition. Some consumers verbalized that they were treated differently when they had private insurance rather than Medicaid.

Consumers expressed, in focus groups and in the telephone interviews, their observations of nurses and their behaviors. They were attentive not only to psychomotor skills in relation to the execution of procedures, but cognitive and affective skills as well. (See Figure 13.) They often indicated that the care received was reflected in how well nurses worked with others, and how well they maintained their appearances. Eighty-three per cent (83%; n = 498) of the consumers stated that working well with other health care professionals was "very important."

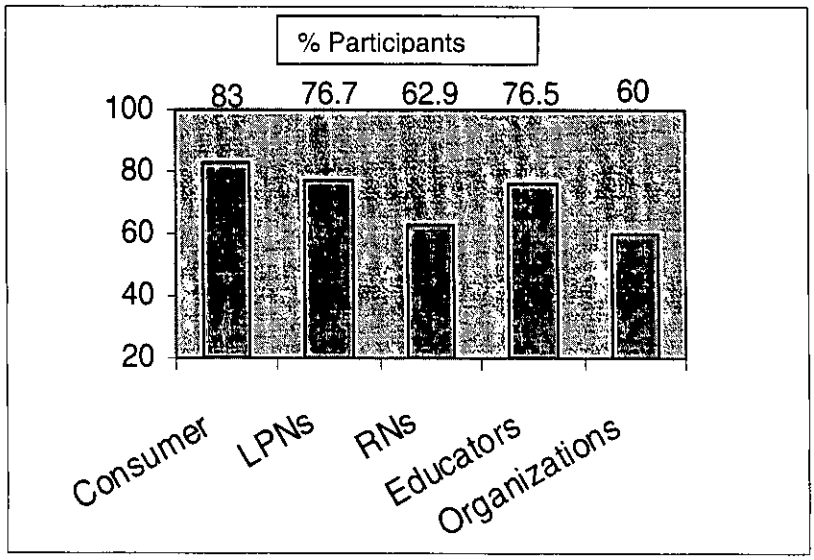

Figure 13. Percent of study participants who rated "Working well with other health professionals" as a "Very Important" attribute for competent nursing practice.

Licensed practical nurses (76.7%; n = 146) and educators (76.5%; n = 26) aligned more closely with consumers than the RNs and organizational leaders. Registered nurses fell 20.1% below the consumer's expectations to 62.9% (n = 172). Organizational leaders dropped to 60% (n = 18). Consumers expressed receiving the brunt of non-cooperative working relations, citing incidents that impacted patient safety such as incidents of care not

given, or stopping another health care worker from doing what a nurse had already done. Additionally, inconveniences were described such as having to repeat histories between departments. A nurse educator stated that even with her efforts to promote good intra and inter professional relations, students were socialized early to compartmentalize from a cooperative relationship with other health care provider groups.

Figure 14 provides comparative data of the participants views on appearance in a professional setting. Complaints about uncombed hair, jewelry and dirty uniforms and shoes were voiced by several of the consumers. These observations appeared to be coupled with concerns about professional demeanor.

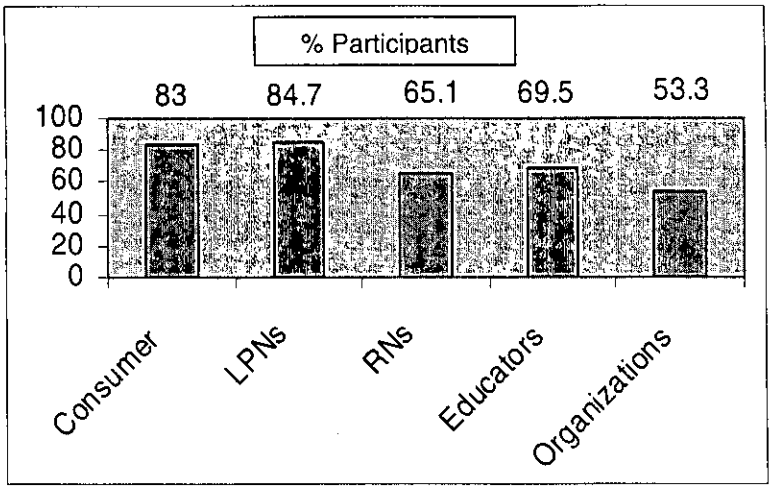

Figure 14. Percent of study participants who rated "Neat clean appearance" as a "Very Important" attribute to competent nursing practice.

Eighty-three percent (83%; $n = 498$) of the consumers rated "neat clean appearance" as "very important." LPNs (84.7%; $n = 161$) evidenced similar views. Registered nurses (65.1%; $n = 178$), education leaders (69.5%; 24), and organizational leaders (53.3%; $n = 16$) veered from the consumers' and LPNs' percentages considerably. Some consumers expressed concerns about the unkempt appearance of nurses. They questioned their well being about potential transfer of germs when nurses used gloves as an excuse to not wash hands, and came to the bedside with tongues pierced, dirty clothing, long nails and long uncombed hair.

Figure 15 addresses bedside manner as an attribute of competent practice. This particular characteristic involves not only communication as a technical skill but relating to patients and their health care needs. It requires an integration of listening and responding skills, and affective behaviors that instill trust.

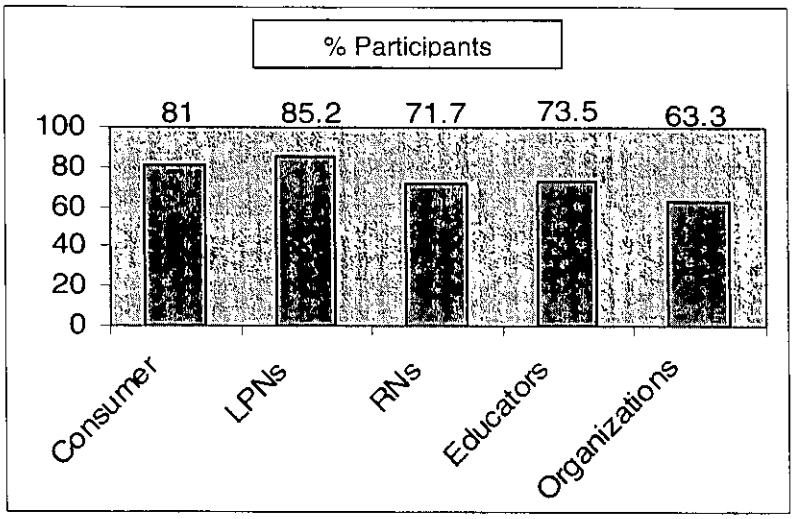

Figure 15. Percent of study participants who rated "Good bedside manner" as a "very important" attribute to competent nursing practice.

Consumers (81%; $n = 486$) actually ranked four per cent below LPNs (85.2%; n = 162). Approximately 72% ($n = 196$) of the RNs viewed a good bedside manner as "very important." Organizational leaders ranked lowest with 63.3% ($n = 19$).

Figure 16 shows that a greater percent (91.5%; $n = 174$) of LPNs acknowledged respect for patients' privacy as an attribute of the competent nurse more than all other groups including consumers. Only 80% ($n = 480$) of the consumers rated this characteristic as "very important."

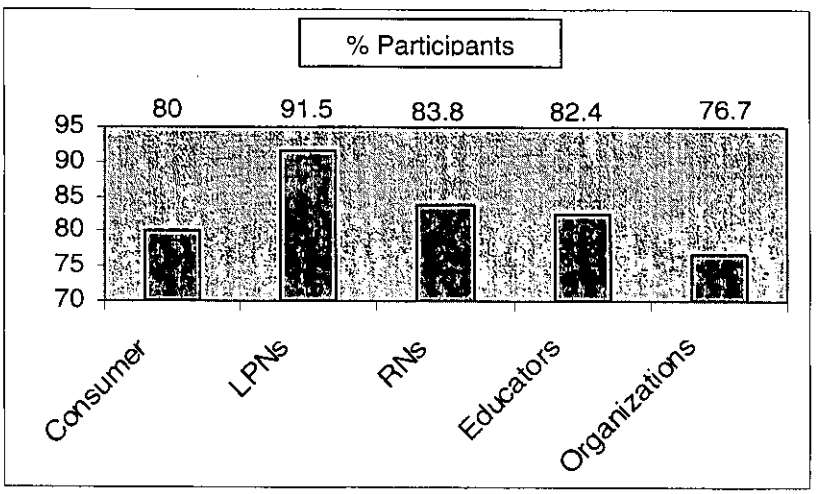

Figure 16. Percent of study participants who rated "Showing respect for patients' privacy" as "Very Important" to competent nursing practice.

More closely aligned with consumers were registered nurses (83.8%; $n = 229$), education leaders (82.4%; $n = 28$), and organizational leaders (76.7%; $n = 23$). This particular outcome bears further investigation today in view of the tremendous federal concerns about privacy and complexities generated by technology.

Although ranked last among the 16 desired attributes, needs of families were still considered "very important" to a majority of the consumers (56%; $n = 336$). (See Figure 17.)

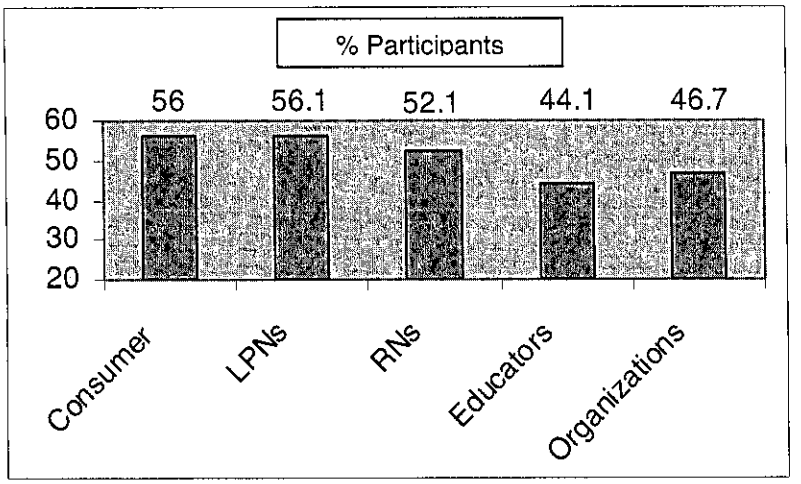

Figure 17. Percent of Study Participants who ranked "Knowing the needs of patients' families" as "Very Important" to competent nursing practice

Licensed practical nurses (56.1%; $n = 107$) and registered nurses (52.1%; $n = 142$) followed closely to the consumers. Education leaders (44.1%; $n = 15$) and organizational leaders (46.7%; $n = 14$) fell well below the other participants. Support from patients' families is important to recovery in many instances. Such support is often dependent upon factors such as education and social services. (Mueser, K.T., et al., 2002). Questions were raised, not by its last placement, but why this particular attribute would have such low percentages of support.

Summative Assessment

In the initial plan for this project one of the research questions asked "Are these factors (attributes, competencies) viewed the same across groups: consumers, licensees, educators, organizational leaders?"

A majority of each group considered the attributes to be 'very important." There was, however a considerable divergence between the participating groups on some of the attributes. Licensed practical nurses aligned with the consumers in greater numbers than all other groups. Registered nurses aligned more closely with organizational leaders. Educators tended to assume a "middle of the road" response. In overall rankings, race, was found to be

associated with ratings on quality of care. African Americans were more likely than Caucasians to rate care as excellent (35 to 28 percent). Sixteen percent (16%) of African Americans rated care as fair to poor in comparison to 12 % of Caucasians. Some licensees, educators and organizational leaders wrote in comments regarding desirable characteristics to be considered as part of licensure requirements (Table 3).

Table 3. Characteristics and Actions Recommended by LPNs, RNs, Education Leaders and Health Related Organizational Leaders for Competent Nursing Practice.

Characteristic or Factor	LPN	RN	EDU	ORG
Good communication skills	x	x		
Medication knowledge, empathy, caring	x	x		
Honesty, truthfulness	x		x	
Knowing current knowledge base		x	x	
Decision making/management skills		x	x	
Good relations with M.D.		x		
Assessment of patients			x	
Knowing how to find information			x	
Critical thinking/management skills			x	
Employer CE requirements directly related				x
Periodic competence check by employer				x
New employee check offs for competence				x
Continuing practice in area of expertise				x
Annual evaluation based on job requirements				x

Several of the written comments aligned with classical expectations of the participants' positions, and are similar to the consumer identified attributes. From a qualitative perspective, licensed practical nurses appear to be "hands on" oriented, while registered nurses and educators were more information and critical thinking oriented. Organizational leaders who primarily held nurse executive roles focused on evaluation modalities.

Factors Influencing Competence according to Consumers

In the 1999 study "Consumers' Perceptions of Competence in Nursing (Mann (Lazarus), et al.) a qualitative analysis revealed several factors that consumers perceived as influencing competence. Licensees, education leaders and organizational leaders were asked to indicate which of the consumer indicated factors they agreed with and those with which they did not agree. Table 4 provides a summary of their responses.

Table 4. Factors that Consumers Said Influence Nursing Competence and Percent of Study Licensees, Educators and Organizational Leaders in Agreement

Factors	Licensees (n = 463)		Educators (n = 34)		Org. Leaders (n = 30)	
	n	%	n	%	n	%
Educational preparation	440	95	33	97	28	93
Number of patients	417	90	31	91	28	93
Education for procedures	449	97	34	100	28	93
Hours Worked	394	85	31	91	24	80
Attitude	426	92	33	97	26	87
Work conditions	403	88	33	97	25	83
Salary	333	72	20	59	18	59
Involved in professional activities	245	53	29	85	26	86
Evaluation by consumers	241	52	16	46	17	57

As shown in Table 4, six consumer identified factors were highly supported by licensees, educator and organizational leaders: educational preparation, number of patients (workload), education for new procedures, hours worked, attitude and working conditions. Over 90% of the licensees (n = 417) supported each of the factors as influencing competence. Greater than 90% (n = 31) of the educators also agreed with the consumers on educational preparation, number of patients, educational procedures and attitude. They also supported hours worked with 85% (n = 29), and work conditions at 88% (n = 30). Organizational

leaders supported each category at 80% (n = 24) or higher. Educational preparation, numbers of patients and education for new procedures received 93% (n = 28) support. Eighty percent (n = 24) support was granted to hours worked as an influencing factor. Attitude was supported with 83% (n = 25), and work conditions rated 88% (n = 26).

Consumer identified factors least supported by licensees, education leaders and organizational leaders were salary, being involved in professional activities and evaluation by consumers. "Salary," as an influencing factor, rated considerably lower among licensees (72%; n = 333) than the aforementioned factors. Educators and organizational leaders were even lower with 59% (n = 20), and 57% (n = 17) respectively. "Being involved in a profession," as an influencing competency factor, received a reasonable vote of support from educators (85%; n = 29) and organizational leaders (86%; n = 26). Only 52% (n = 241) licensees voted positively for this factor. The lowest ranked factor influencing practice was "evaluation by consumers." In this, 52% (n = 241) licensees, 45.5% (n = 16) education leaders, and 57.1% (n = 17) organizational leaders saw the consumers evaluation as a factor for influencing competence in practice.

Substance Abuse as a Factor in Competent Practice

There are numerous complexities involved in protecting the public from unsafe and incompetent practitioners. Failure to meet a standard of practice may be influenced by many factors. Even when cases of incompetence are unintentional, considerable harm can occur. Most cases are unintentional, including those previously mentioned. Disciplinary action may be taken at the employer level and at the regulatory level, depending on the severity of the problem. When, however, a violation of a standard crosses a line from unintentional negligence to one that involves deliberate illegal behaviors, consumers and licensees had definite opinions that severe disciplinary actions should be taken. Consumers specifically identified substance abuse and illegal behaviors, such as felonies, of nurses as threats to their safety and well being. They saw these characteristics as negatively influencing competence in nursing practice and stated the Board of Nursing has a responsibility to protect them from incompetent nurses. Consumers, licensees, education leaders and organizational leaders were asked a number of questions regarding their views on actions that should be taken for public protection in matters of substance abuse and other illegal behaviors.

Boards of nursing generally take a preventative and proactive role in public protection. When there is a complaint of substance abuse or illegal behavior, boards are obligated to provide rapid response to an alleged threat to public safety, and are accountable for assurance of due process and due vigilance in such matters. In Alabama, licensees charged with violations of the "Nurse Practice Act" are entitled to due process of law with legal representation. If found guilty, a variety of disciplinary actions ranging from reprimand to probation with stipulations for a designated time period, to revocation of the license. Consumers' views on actions to take when a licensee is found guilty of substance abuse are shown in Figure 18.

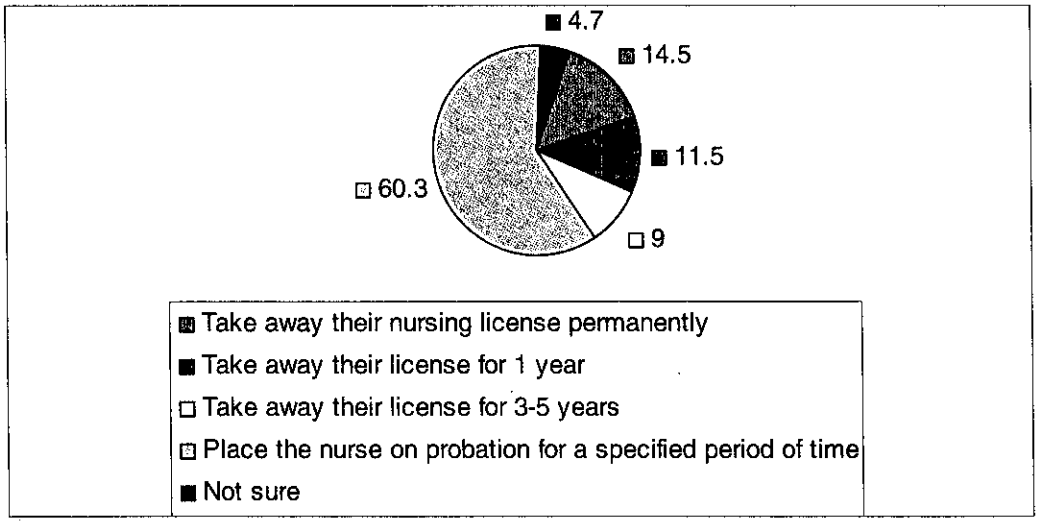

Figure 18. Consumers' recommendations for Board actions for licensees found guilty of substance abuse.

The majority of consumer participants (60.3%; $n = 362$) specified probation for a specified period of time for alcohol or substance abuse. Qualitative comments also placed demands for treatment and monitoring while on probation. Almost 15% ($n = 87$) stated that the license should be permanently removed. The third highest option was removal of the license for one year (11.5%; $n = 69$); and removal of the license for three to five years was supported by nine percent ($n = 54$). Only 4.5% ($n = 27$) were not sure of action to be taken. The responses from the participating licensees, education leaders and organizational leaders were in line with the consumers.

Figure 19 provides insight into another faction of consumers' perspectives regarding regulation of nurses who abuse drugs and alcohol. While a majority of the consumers agreed that probation is an option disciplinary action, a majority (80%; $n = 480$) clearly stated that treatment was an essential part of probation and that the licensee should not work while in treatment.

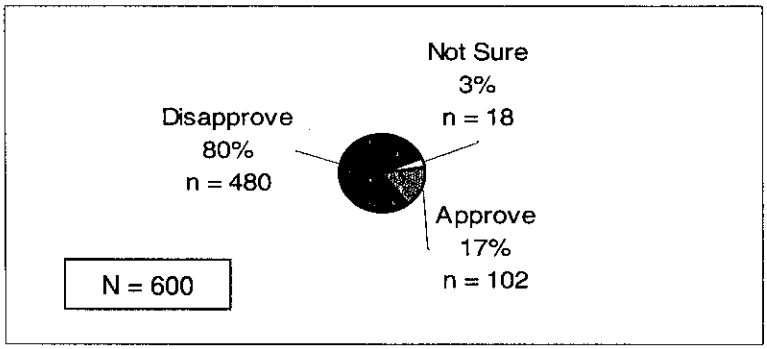

Figure 19. Consumers' view of nurses working while in treatment for drug/alcohol abuse.

Qualitative comments indicated that consumers were willing to have licensees work after treatment, provided they were monitored while on probation. Seventeen percent (n = 102) approved of the nurses' working while in treatment, and three per cent (n = 18) were "not sure."

Felonies and Misdemeanors as Factors in Competent Practice

In considering issues such as felonies and misdemeanors, the public (consumers) expressed serious concerns about those individuals who would violate public trust through unethical behaviors, whatever their circumstances. In matters that did not involve felonies, sexual misconduct or harm against an individual, although varying degrees of opinion, a majority in the focus group were willing to allow probation of the license. The next table provides frequencies of licensees', education leaders' and organizational leaders' perspectives on allowing probation as a disciplinary actions for major offenses.

Table 5. Frequencies on Study Participants' Perspectives on Probation of License for Major Illegal Offenses

Offense	Licensees (n = 463)		Educators (n = 34)		Organization Leaders (n = 30)	
	#	%	#	%	#	%
Felony	104	22	20	29	6	20
Sexual misconduct	156	33	10	29	9	30
Crime against a person	123	26	34	100	11	36

Legal authorities and references describe licensure as the most restrictive form of occupational regulation. Licensure is the major means by which a governing body defines requirements for safe practice in the interest of public welfare. It provides title control, limits practice to a specific area of preparation, and validates that an applicant has met the requirements as specified under law. Laws that establish licensing requirements also provide for penalties for illegal and unlicensed practice. (Reeves, 1993)

Mechanisms for Insuring Competence in Nursing

Currently, all of the 50 states in the United States and its territories require licensure to practice. All have established standards for entry into practice including successfully passing a national qualifying examination, National Council Licensure Examination® (NCLEX®), that has undergone the scrutiny of each states regulatory authority. No other qualifying examination is required after the license is granted unless a certifying examination

is required for advanced practice. The entry license is considered "good for life," if application for renewal of license processes are followed, standards of practice are upheld, and no action has been brought against the license for violation of laws. In some states, such as Alabama, continuing education requirements must also be met. In other states, evidence of continued competence must be met, such as continuous work or no greater absence from work than three to five years. When licensees violates standards of practice, such as criminal acts or acts of negligence, or any act that brings reproach upon the profession, they are subject to discipline including loss of license.

The inconsistencies in the various states' regulations and the numerous arguments over how one measures continued competence gives rise to concerns for public safety. Consumers were asked if licensure should be "good for life" as currently exercised in Alabama. Only eight percent (8%; $n = 48$) said "yes"; almost all others (89%; $n = 534$) said there should be some other mechanism for demonstrating competency. The remaining three percent (3%; $n = 18$) were "not sure." Other study participants were more liberal in this matter. (See Table 6 for conversions.)

Table 6. Health Care Participants' Acceptance of Licensure for Life as Adequate for Insuring Nursing Competence ($N = 513$)

Participant	*Level of Acceptance*	
	%	*n*
LPN	78%	148/190
RN	75%	206/273
Educator	65%	22/34
Organizational Leader	52%	16/30

As shown above, LPNs, RNs, education leaders and organizational leaders by majority support licensure for life. While research evidences a willingness of participants to incorporate other requirements for license retention, minimal numbers support examinations for continued practice. In the first consumer study (Mann (Lazarus), et al., 1999) consumers identified as "very important" several mechanisms to demonstrate competence for entry into practice and to demonstrate competency for license renewal to continue practice (Table 7).

The consumers in the focus group took a global view of competence and included mechanisms that incorporated measurements and evaluations of knowledge, skills, attitudes and ethical and legal behaviors. They also specified that individuals licensed in other states should meet the same requirements for licensure as legally mandated in the Alabama Nurse

Practice Act (Code of Alabama, 1975, amended, 2004). They were particularly concerned about safe practice and substance abuse. Licensees, educators and organizational leaders were asked state their agreement or disagreement with the consumers' determinations.

Table 7. Mechanisms for Insuring Nursing Competence

Consumer Specified Mechanisms	Percent Agreement by Licensees (n = 463), Educators (n = 34), and Organizational Leaders (n = 34)					
	Licensees		Educators		Organizational Leaders	
	n	%	n	%	n	%
Entry Examination	445	96	34	100	30	100
Continued Practice Exam	79	17	09	27	05	17
Continuing Education	389	84	25	73	24	80
Criminal Background Check	431	93	28	82	25	83
Drug Screen	431	93	30	88	24	80
Employee Evaluation	384	83	30	88	21	70
Self Evaluation	324	70	20	59	21	70
Peer Evaluation	232	50	19	56	19	63
Additional Degree	46	10	05	15	05	16
Portfolio	65	14	05	15	07	23
Certification	171	37	12	35	19	63

Five of the mechanisms were more favored by licensees to assure competence for practice in nursing: examination for entry into practice (96%; $n = 445$), continuing education (84%; $n = 389$), criminal background checks (93%; $n = 430$), drug screens (93%; $n = 430$); and, employer evaluations (83%; $n = 384$). Six of the mechanisms were favored less: Examination for entry into practice (17%; $n = 79/463$), self-evaluation (70%; $n = 324$), peer evaluation (50%; $n = 232$), obtain an additional degree (10%; $n = 46$), submit a portfolio to the regulatory agency (14%; $n = 65$), and certification by a professional association (37%; $n = 171$).

The same categories that licensees ranked as high and low for insuring competence, also received similar rankings by education leaders and organizational leaders. A significant

association (p. <.05) was not detected for license type or educational levels with the rankings of mechanisms.

All of the educators who participated in the study held a masters or higher degree. All were also registered nurses qualified to practice in Alabama. For education leaders, the top five mechanisms designated as mechanisms to evidence competence to practice were: written examination for entry into practice (100%; n = 34/34); continuing education (73%; n = 25/34), criminal background checks (82%; n = 28); drug screens (88%; n = 30), and employer evaluations (88%; n = 30). The mechanisms that were ranked lowest among educators were: written examination for continuing practice (27%; n = 9), self-evaluation (59%; n = 20), peer evaluations (56%; n = 19), obtaining another degree (15%; n = 5), submitting a portfolio to the regulatory agency (15%; n = 5), and certification by a professional association (35%; n = 12).

Organizational leaders (n = 30) also ranked the written examination for entry into practice at 100 per cent. As with the other two groups, an unfavorable assessment was awarded to the written examination for continuing practice (17%; n = 5). Three of the mechanisms ranked at or near 80%: continuing education (80%; n = 24), criminal background check (83%; n = 25), and drug screens (80%; n = 24). Employee and self evaluations were ranked as 70% (n = 21). Peer evaluation and certification by a professional organization were ranked with 63% (n = 19) acceptable. Obtaining another degree was not well accepted at 15% (n = 5). Portfolios were also viewed as unacceptable by a majority (23%; n = 7).

The three most rejected mechanisms for continued licensure were written examinations for continued practice, obtaining another degree, and submitting a portfolio to a regulatory agency. Chi- square analysis evidenced no significant association (p. < .05) between ethnic origin, license type, gender, age and education regarding a potential requirement for a written examination as a mechanism for assuring continued competence or for continued licensure. The majority of the three groups, licensees, educators and organizational leaders, simply reject it. In matters of education, however, the higher the degree the less favorable the respondents were to a written examination. One qualitative comment describes the majority of responses. "If you ever give a written examination for continued competence there will be a real shortage of nurses...." Other comments give better insight into reasons for aversion to such an examination. For example, "What will I be tested on? I haven't worked with adults [children, obstetrical patients, trauma victims...] since I was a student." "Technology has changed." "I have worked in administration for 20 years. My expertise in practice is no longer clinically oriented." "My knowledge of pharmacologic interventions is now specialized."

The basic entrance examination primarily covers clinical nursing situations across a wide area of care for adults and children. Practice, however, is usually focused to a specific area so that expertise evolves to a limited field. Testing for competence across all practice areas and populations may not be reasonable. Developing standardized tests to cover general practice in a world of specialized practice may be incongruent. As an aside, when considering ethnic origin, 58 per cent (n = 50/86) of the African American licensees and

approximately 50% (n = 189/377) of the Caucasian nurses were willing to embrace a skills examination for continued competence.

Opinions about portfolios as a requirement for continued licensure were generally negative. License type, ethnic origin, education, and age were not found to be statistically significant (p. <.05). As with the written examination for continued licensure, the participants rejected, by majority, the portfolio as a means of evidencing continued competence.

Further analysis demonstrated that, although the participants acknowledged employer evaluations as a mechanism for assuring continued competence, they did not necessarily wish to have employer evaluations submitted to a regulatory agency. Indeed, it fell far to the negative with licensees stating "no support" by 63% (n = 291). Least willing were nurse educators (76.5%; n = 26). Following closely were organizational leaders with 70% (n = 21). There were no significant differences between ethnic groups in considering employer evaluations being submitted to evidence competence for regulatory purposes. African Americans gave similar responses to the overall population of licensees (62%; n = 58).

When consumers were asked if they believed nurses should be allowed to work while in drug and alcohol treatment, a majority (80%; n = 480) responded that they disapproved. Qualitative comments indicated that consumers were willing to have licensees work after treatment, provided they were monitored while on probation. Seventeen percent (n = 102) approved of the nurses' working while in treatment, and three per cent (n = 18) were "not sure."

Regulation of Endorsees to Practice in Alabama as a Mechanism for Insuring Competence in Nursing Practice

All study participants were asked their perspectives on expectations for nurses to meet who are licensed in another state and wish to be licensed in Alabama. Consumers in the focus group made the following recommendations as requirements for licensure: Certifying examination, education comparable to that of graduates from Alabama nursing education programs, testing for job competence, criminal background check, and drug testing. Figure 20 provides comparative data of consumer and other participants' responses regarding a requirement for a certifying examination. Consumers (85.8%; n = 516), and organizational representatives (93.3%; n = 28) are shown to believed that endorsees should take a certifying examination to practice in Alabama. Licensed practical nurses (25.9%; n = 49), registered nurses (18.9% n = 52), and educators (3.2%; n = 1) did not support this recommendation.

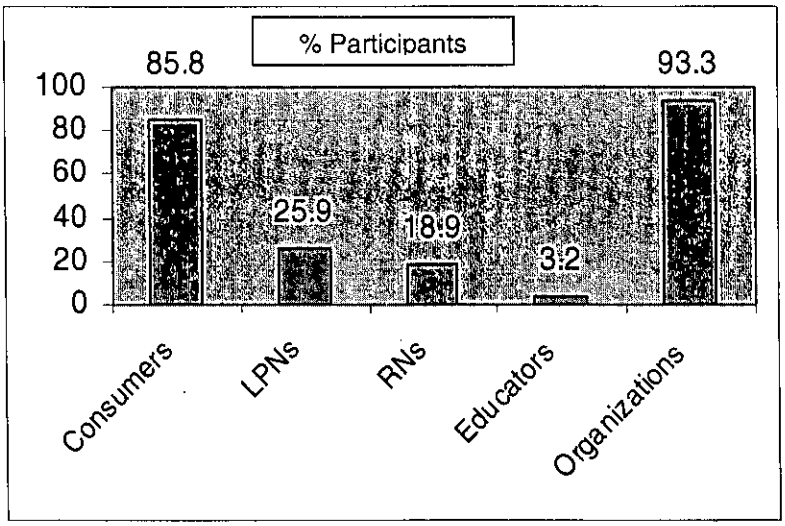

Figure 20. Percent of support by study participants for requiring a certifying examination to license nurses requesting endorsement into Alabama.

Qualitative comments made by licensee participants indicated that such a practice in Alabama could infringe on property rights and on mobility to other states by Alabama licensees. As previously indicated, a great majority of study participants found examinations after entry into practice as undesirable for continuing in practice.

Consumers recommended formal educational preparation for endorsees comparable to that of graduates from Alabama schools of nursing. This includes a foundation in arts, science, mathematics and nursing theory and practice in all major clinical areas. Figure 21 shows percentage agreement of other study participants with consumers.

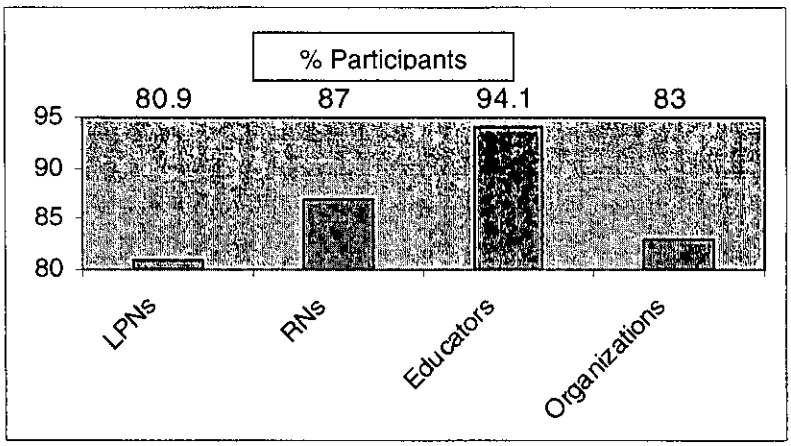

Figure 21. Participant support for endorsement candidates to have education comparable to licensed nurses with Alabama nursing education.

Of great concern to consumers was assurance that the endorsees would be well prepared in knowledge and skills associated with medications and procedures that might be conducted upon the public. They also listed expectations as having a good background in anatomy and physiology, blood work, laboratory results, vital signs, and communication skills. The consumers specified a need for nurses to be prepared in nurse and patient relations. This included professional behaviors among the nursing staff, as well as with patients.

The percentage of educational leaders topped other participants in this consumer recommendation (94.1%; $n = 32$) regarding endorsees' educational preparation for licensure in Alabama. Registered nurses followed by 87% ($n = 238$). Licensed practical nurses (80.9%; $n = 154$) and organizational leaders (83%; $n = 25$) supported the recommendation, though to a lesser percent. A division, however, was shown in relation to the consumer recommendation for job competence (skills) testing. (See Figure 22.)

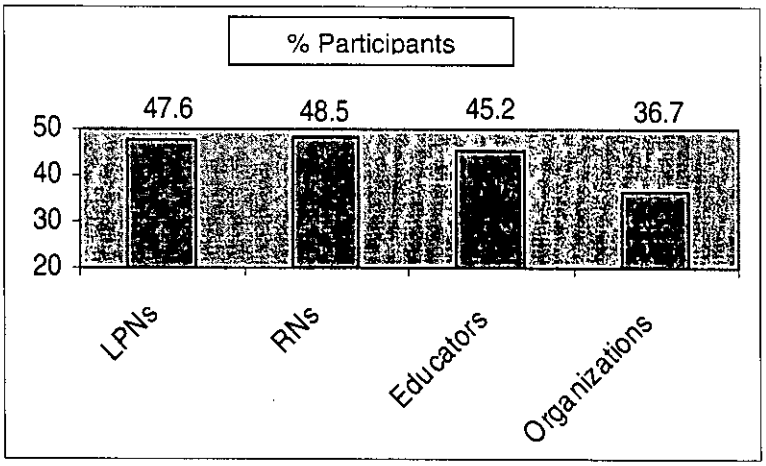

Figure 22. Percent of licensees, educators, and organizational leaders who supported testing endorsees for job competence.

Some speculation was made during audience discussion at the original presentation of the study (Lazarus & Permaloff, American Nurses' Association Convention, 2000), about why a majority of the participants objected to skills testing. Included among possible reasons by LPNs and RNs was a fear that this could influence other states to include such a requirement and thereby restrict future employment opportunities (LPNs: 47.6%; $n = 90$) (RNs: 48.5%; $n = 132$). Comments such as "nurses are afraid of testing," prevailed. Others said it was a threat to their property right earned in accordance with the law. It seems that the higher the position, the greater the resistance to skills testing after initial licensure, as a means of assuring competence (educators: 45.2%; $n = 15$; organizational leaders: 36.7%; $n = 11$).

All categories of participants supported the strong consumer (97.9%; $n = 587$) recommendation for a criminal background check for potential endorsees. Figure 23 illustrates the results.

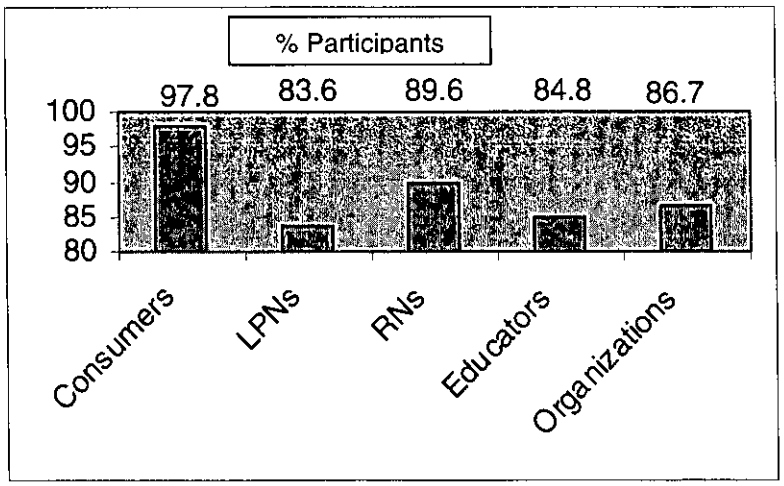

Figure 23. Percent of study participants' support for criminal background check for potential endorsees for licensure.

Licensed practical nurses (83.6%; n = 159/190) supported having a criminal background check for potential endorsees. Almost 90% (n = 245) of the registered nurses endorsed the requirement. Educators responded (84.8%; n = 29) with a vote similar to the LPNs; and organizational leaders answered with 86.7% (n = 26) affirmative responses.

Figure 24 provides data supportive to mandatory drug testing for licensure by endorsement. With a mobile society, substance abuse is a concern for all regulatory agencies in their commitment to public safety. During discussion in the consumers' focus group one young man said he knows a nurse who is a "user." She is thought by some to be a "good nurse." He, however, said he would fear for his safety if she were to be his nurse. In his words, "Good or not, I don't want her workin' on me."

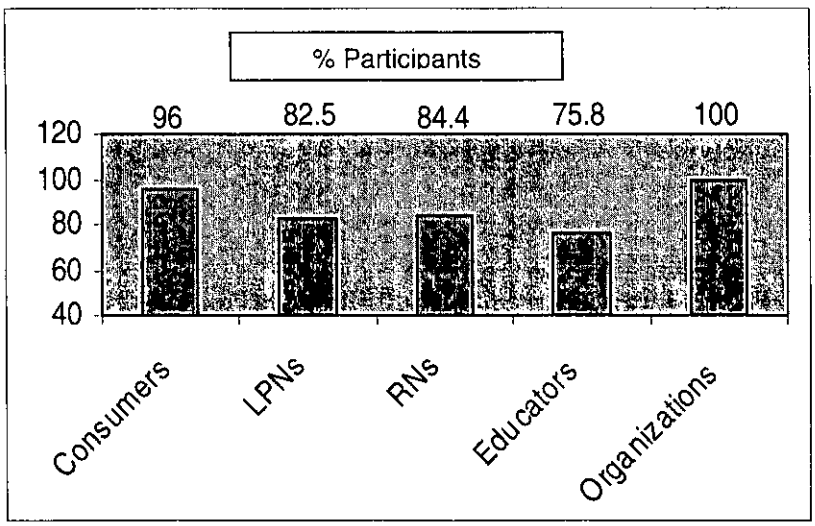

Figure 24. Percent of study participants who supported drug testing potential endorsees for licensure.

The recommendation for mandatory drug testing for endorsement of licensure to practice nursing in Alabama was received positively from all parties, although educators departed considerably from the other groups, for unknown reasons. Approximately 75.8% (n = 26) said testing for drugs should be executed. Consumers (96%; n = 576) and organizational leaders at 100% (n = 30) closely aligned. Licensed practical nurses (82.5%; n = 157) and registered nurses (84.4%; n = 230) responded affirmatively. General discussion by all groups led to the qualitative theme of public safety being threatened by incompetence generated by nurses under the influence of alcohol and/or controlled substances.

Summary of Findings

Findings are qualitatively capsuled in the following statements.

- Variance exists between levels consumers placed on importance of consumer identified attributes for competence, and those of licensees, educators and organizational leaders. Those most closely aligned included "knowing how to use equipment properly," and "being able to handle a crisis situation. In all others, there was considerable divergence in two or more areas from consumers' analysis of importance.

- Similarities are exhibited across groups regarding factors influencing competence, particularly in matters of "educational preparation", "attitude" and "number of patients." Organizational leaders separated from the other groups in "hours worked" and "work conditions" as influencing factors in competence.

- Dissimilarities exist across groups regarding mechanisms for assuring competence, except in the area of examination for continuing practice. In this area, all participants except consumers rejected this as a desirable mechanism for insuring competence. No significant association $p < .05$ was detected between ethnic origin, license type, gender and education regarding a potential requirement written examination as a mechanism for assuring continued competence or for continued licensure.

- Continuing education models alone were acknowledged as not ensuring competence, but evidence exists from licensees in Alabama and through other research that CE does positively impact practice.

- Nurses in clinical situations made comments that evidenced conflict over personal responsibilities for ensuring competence versus employer driven expectations of competence. (Nurse may be care-effectiveness driven and employer may be cost effectiveness/efficiency driven).

Implications of Findings Relative to the Accountability Model for Nursing Competence

From 1996 – 2000, the Alabama Board of Nursing authorized the execution of four formal research projects on competence for nursing practice. Each project provided evidence on which decisions could be based for establishing, amending and implementing regulations that could contribute to public protection. Each of the project's study findings were publicly

distributed by publication in reviewed journals and/or presented at state and national conferences. This competency project affirmed the Board's position on evaluative research (2000).

> *The Board formally adopted an evidenced-based evaluative research agenda in fiscal year 2000. The impetus for this decision was the Board's need to provide logical rationale for making changes that impact the public's safety and welfare. As the Board embarked upon the 21st century, projects of prime concern in regulatory research were issues of discipline, competence for entry into practice and advanced practice. Matters of public accountability are also prime areas for investigation. These include the Board's evaluation of its various statutorily mandated programs such as the disciplinary and disciplinary alternative programs for substance abuse, continuing education, and scholarship. (http://abn.state.al.us/main/board/research.html.; Title: Research: Undergirding Regulation for the Millennium)*

The challenge then lay in determining regulatory implications that would impact the Board if committed to applying the evidence based agenda to decision making to meet the aim of assuring competent nursing practice. The following conclusion was based on research processes over the four year period. Implementation of an accountability/competency model are numerous and complex, but with adequate planning and resources, the job could be done.

The Board placed in priority a plan to evaluate regulations for adequacy to assure competency in nursing practice, then prioritized those regulations that needed updating. The Board held itself accountable to the State of Alabama and its public for implementing current regulations and implementing changes in regulations. Direct involvement by the Board included:

1. Involving vested interest groups' for input to develop a realistic model for measuring competence.

2. Designing a legally defensible, logistically sound model for execution and evaluation of competencies for entry into and continuing practice.

3. Providing adequate notice and education of licensees and the public about any alteration in, origination of competence regulations, or implementation of any phase of a competence model through regulations is critical.

4. Assuring that proposed changes are:

    - Administratively feasible
    - Publicly credible
    - Professionally acceptable
    - Legally defensible

- Economically affordable

A framework was established whereby licensees, educators and health related organizations would be held accountable for personal and professional integrity.

1. Honesty in reporting and submitting applications
2. Desire to maintain competence
3. Individual and employer failure to report incompetence, dishonesty in reporting, inconsistency in reporting.
4. Performance within standards of practice
5. Updating knowledge and skills

Various areas of involvement by educators and organizations including professional associations and health care delivery agencies were delineated such as:

a. Skills training and evaluation of skills.
b. Continuing education relevant to areas of expertise.
c. Entry into practice with clearly designated skills.
d. Quality of programs.
e. Employer accountability.
f. Provision of education.
g. Evaluation for competence of employees.
h. Accurate reporting.
i. Employer tracking for competence.
j. Shift differential and quality of CE and skills checks "after days."

Professional organizations and associations hold a special place in the Accountability Model for Competent Practice. Implications were derived from the study for unique opportunities. In this a cooperative necessity was recognized between boards of nursing, licensees, educators and organizations.

a. Providing proof of meeting competence standards; assuring that licensees are licensed.
b. Enhancing colleagueship, networking and professional development.

c. Testing knowledge and skills.

d. Promoting evaluation of knowledge.

e. Establishing standards of practice i.e. JCAHO, ANA, other.

f. Providing continuing education through programming, funding, and benefits.

g. Facilitating knowledge in pathophysiology, communications, technical basics, ethics, critical thinking, and cultural diversity.

h. Taking actions to enhance competence in technical skills in nursing procedures, managing equipment, and communications.

i. Facilitating development of management skills, critical thinking, organizing and prioritizing work, managing crises, finances and other.

Plans were made to mobilize all contingencies in the Accountability for Competence Model to assure that threats to competence are curbed. When there are violations of standards of practice or violations of regulations due to substance abuse, felonious acts or misdemeanors, the full force of the law is to be activated to ensure public safety.

Progress Made in Implementing the Accountability Model for Competent Nursing Practice

In the years since completion of the research, the Board has reviewed the findings of all the studies conducted and completed since the initiation of the competence project and adoption of the Accountability for Competent Nursing Practice Model. Priorities were established through strategic planning to use the evidence to bring about change with specific attention to consumers' input.

The consumers were explicit in expressing their need for assurance that nurses licensed in Alabama are competent to practice. They identified several issues of safety and factors they considered to be contributors to incompetence, such as substance abuse, poor work conditions, excessive work hours, lack of knowledge essential to safe practice, lack of educational preparation for new procedures and inadequate knowledge of medications. They further expressed concerns about deficit ethical behaviors and professional demeanor. The consumers also recommended a number of mechanisms to be considered for assuring competence, both for entry and continuing practice.

Review of Regulations

The Board, first, tasked itself by examining regulations that might need amending to address the consumers' concerns. The review of the Administrative Code began in 2000 and the first revised chapter became effective in July 2001. The timeline in which the first amendments became effective was completed in an exemplary time frame. Appendix V provides an outline of the Administrative Procedures Act requirements for legislative review. One may note that proposed changes must be published and open for public review and comments as well as for legislative oversight.

The Board also determined that regulations would be reviewed every three years to assure current, up to date regulations. By the end of fiscal year (FY) 2003, the entire administrative code had been revised. In FY 2005, the three year cycle of review began. Official channels were exercised to apply the APPLE Model in the evaluation of any proposed changes (administratively feasible, publicly credible, professionally acceptable, legally defensible, and economically affordable). The focus of the regulations was accountability at all levels.

Changes in Regulations

The review of regulations obviously revealed areas that could be strengthened, the first of which was the "Standards of Nursing Practice." Chapter 610-X-6-.02 addresses conduct and accountability. Requirements were instituted for individual accountability for mandatory reporting of substandard, impaired, illegal, or unethical practice directly to the Board of Nursing. In 2002, Chapter 610-X-8, "Disciplinary Actions" included as a ground for discipline, that the nurse administratively responsible for assuring proper credentialing of nurses would be held accountable for allowing individuals to practice who were not properly licensed or credentialed. Since that time, the Board has in fact disciplined individuals for failure to assure the proper credentials of the nurses under his or her administrative responsibility. Also in 2002, the nursing education rules (Chapter 610-X-3, "Nursing Education Programs") were changed to eliminate process regulations. An outcome approach was incorporated into the rules to hold nursing education programs accountable for identified outcomes including theoretical competence. National Council Licensure Examination (NCLEX®) results for first-time graduates was in the prior rules and was included in the revised rules. Other regulatory changes in the areas of substance abuse, advanced practice and continuing education will be addressed in following paragraphs.

Inclusions of Nurse Licensees, Educators and Health Related Organizations and Professional Groups in Implementing the Accountability Model

In order to effectively institute the Accountability Model and promote changes in regulations, the Board recognized that those with a vested interest should be actively engaged in the change process.

Advisory Councils

The Board has the statutory authority to use advisory councils to receive input from stakeholders. Throughout the rules revision process the board appointed advisory councils for Nursing Education, Advanced Practice, and Continuing Education. Membership was by invitation and nursing organizations as well as individuals with expertise in a particular area were included.

Summits

Beginning in 1999, the Board instituted a summit meeting, the purpose of which was to engage in dialogue with participants about issues that impact public safety and nursing. Invitations are extended to individuals and organization that have an impact on health care.

At the October 2005 Summit, the entire focus of the meeting was continued competence. An agenda of this meeting is included as Appendix VI.

Task Forces

The Board established task forces for short-term review of particular projects or issues, such as the one that addressed chemical dependency. The Task Force on Chemical Dependency evolved to address recommendations from a research project that provided evidence of deficits in the regulations on the alternative to discipline program. Changes in the monitoring of chemically dependent nurses occurred as a result of the Board's Task Force.

Center for Nursing

The nursing shortage had been discussed in Alabama for over 20 years. Various groups, commissions, alliances, an organizations had different initiatives. Now the consumers' perspectives were added. One of the Board's Summits focused on the nursing shortage and keeping with the evidence-based approach, experts from the North Carolina Center for Nursing and South Carolina Colleagues in Caring project presented information about their operations. During the 2000 RN renewal of licenses and 2001 LPN renewal, specific questions were asked in a workforce survey. A monograph was developed and widely distributed. Nurse executives of health care organizations participated in the development of the survey questions. Board staff participated in the Alabama State Nurses' Association (ASNA) Commission on Professional Issues and the nursing shortage was an ongoing issue for discussion. In 2003, the executive directors of ASNA and the Board attended a national nursing workforce conference. In May 2003, the Board approved an operational plan for a Center of Nursing. The purpose of the Center is to collect, analyze and distribute data related to the nursing workforce.

A new position was created at the Board for a Nurse Workforce Researcher to serve as the Director of the Center. An earned doctorate was required. The position was filled in March 2005. The board will engage an advisory council to assist in looking at issues related to workforce.

Substance Abuse

The most frequently occurring disciplinary actions taken by all Boards of Nursing are due to chemical dependency and substance abuse. In 1994, the board developed an alternative to discipline program for nurses with chemical dependency, physical limitations, and mental illness. Regulations provided requirements for treatment, then a schedule of monitoring over an extended period of time for detecting relapse after treatment. Further, monitoring was conducted to assure active involvement in various support programs. Research revealed numerous deficits in the program. A chemical dependency task force reviewed the monitoring requirements and made significant recommendations for changes to the Board's monitoring policies and processes. Monitoring requirements for both the alternative program and discipline action became parallel.

One of the issues raised in the chemical dependency study was chemical dependency treatment program adequacy and effectiveness. The Board had a list of "approved" chemical dependency treatment providers but no one from the board visited or audited the programs. In 2002, the rules were changed to reflect "Board-recognized" chemical dependency treatment providers. The Board, however, lacked the expertise within the Board members and staff to evaluate the adequacy of the treatment programs. In 2003, based on a recommendation from the Board's Executive Officer, the Board approved a new position for a physician experienced in addiction medicine. In March 2005, an addiction medicine specialist with over 15 years of experience in treating chemically dependent and substance abusing nurses was employed.

During the next six months, the physician visited treatment providers through the State of Alabama and those in border cities of surrounding states. A list of recommendations was provided to the Board. The Board proposed changes to the regulations for chemical dependency treatment providers in 2005 as well as changed stipulations in monitoring agreements and orders based on recommendations of the addiction medicine specialist.

Prospective variables are in the process of being identified so that a study of chemical dependency treatment can occur. In addition, expectations of treatment providers for communication with the Board are clearer now that an explicitly qualified individual is focused on the issue. In addition to the chemical dependent treatment providers, the addiction medicine specialist reviews cases and drug screens so that the staff has the most accurate up-to-date information to aid in monitoring. The actions taken in this area are responsive to consumers' recommendations.

Research

The completion of the "consumer studies" occurred with the advent of the 21st century. The data from this research opened a new agenda in regulatory research to address issues of prime concern such as the factors affecting Alabama's nursing workforce, discipline, competence for entry into practice, and preparation and continued competency for advanced practice. Four new projects were initiated during or since 2000. While the new research was being conducted, evidence from the previously conducted projects were employed in amending regulations to address issues of educational preparation, standards of practice, discipline and substance abuse. As of 2005, all of the new research has been completed or is in the final stages of completion.

- Nursing Workforce in Alabama, Monograph published in July 2002. This study involved approximately 41,000 licensed nurses.

- Mayday Pain Project: Monitoring and Investigating Pain Management by Certified Registered Nurse Practitioners. May, 2002.

  This project focused on pain management and prescriptive practices of certified registered nurse practitioners, (CRNPs) and compliance with collaborative practice protocols. The study was funded by a grant received from the American Society of Law, Medicine, and Ethics Mayday project.

Three hundred forty seven (347) CRNPs within the state responded to a questionnaire that addressed educational preparation, prescribing practices, and barriers from regulatory agencies regarding pain management.

- The Alabama State Funded Post-Baccalaureate Nursing Scholarship Program: An Outcomes Study. Monograph, 2001, published by the Board of Nursing 2002.

  This was evaluation research that was conducted to determine: (1) if the program outcomes were consistent with law, (2) characteristics of the population across time, (3) application of education to practice, and (4) perceived value of the scholarship program. A decision was also made to assess needs for financial support for graduate nursing education in Alabama in view of workforce concerns.

- Synthesis of data examining nurses' performance of practice skills/competencies. Report to the Board, 2003.

  This project examines available data from the several projects, the Alabama Board of Nursing' s Continued Competence Study, the National Council of State Boards of Nursing 's Practice and Professional Issues (PPI) survey, the National Council of State Boards of Nursing 's 2001 Employers survey, and data from the Alabama Board of Nursing's subcommittee on Congruence between practice and education, to determine future directions for the Board regarding congruence between practice and education.

- School Nurse Services in Public Schools. Monograph in progress (data analysis completed 2005).

  In 2001, regulations were amended that specifically addressed delegation of specific tasks by nurses to unlicensed personnel in the school setting. During the academic years 2003-2004, data were collected to determine the extent of health services being offered in public schools by nurses.

An agenda of past research is published on the Board of Nursing Web site (www.abn.state.al.us). Future research will focus on evaluation of regulatory changes that have been initiated since 2000. Studies will continue to be conducted in high profile areas that have a unique impact on consumer safety and welfare, such as workforce issues, advanced practice issues, and continued competence. Evaluation of regulations affecting educational outcomes will be conducted. Specific emphasis will be placed on evaluating educational efforts in development of psychomotor clinical skills for future practice and technological competence, affective and ethical issues. Research will also focus on special needs areas for nursing care such as school health.

Additional Evidence of Accountability Model Implementation

The Board of Nursing heard the concerns of consumers in matters they perceived as impacting their safety and welfare. Two areas that have received considerable attention are efforts to promote continued competence and to enhance public protection. Both of these areas, the mandatory continuing education program and Board action for incompetent practice, have required a confluence of cooperative efforts of all contingents in the Model, the Board, licensees, organizations, educators and consumers. Each of these is held to the accountability standard projected in the Model.

Effort directed by the Board to enhance knowledge updates has included installation of technological resources to make readily available continuing education to be obtained online. Further, ways and means of interfacing credit earned from educational endeavors are being instituted technologically. Tegrity®, an educational enhancement program is to be implemented in FY 2006.

A two percent compliance audit of licensees is conducted with each renewal period to determine compliance with CE regulations. This audit has routinely resulted in disciplinary action invoked for non compliance with regulations to meet the mandated requirements for license renewal. Board approved providers, on the other hand, were paper audited every four years unless there was a complaint of quality for failure to meet Board guidelines within regulations. Since the consumer study was completed, random audits are conducted each year and focused audits occur if complaints are received. The Board withdrew approval from two providers who failed to meet established standards. Withdrawals of approval are posted on the Board's Website.

Processes were implemented to check CE providers during license renewal of RNs and LPNs to determine if CE providers were active. Based on findings of provider audits, changed rules for CE providers allows for disciplinary action against the licensee who lists continuing education earned when the Board's approval is not in effect.

Competence concerns expressed by consumers spurred the Board to upgrade regulations to focus of accountability of nurse administrators to insure that nursing personnel demonstrate competence to practice. First expectations for reporting were sharpened to allow for discipline of nurses administratively responsible for assuring proper credentialing of nursing staff. Individuals were required to report improperly on non credentialed persons seeking or exercising employment within their institution. The Board has also disciplined administrative nurses for failing to report illegal, substandard, unethical or impaired practice to the Board.

Increased cases of incompetence have been reported to the Board and actions extending from reprimands to revocation of licensure are on record. The number of written complaints exceeded 1,000 cases in FY 2005. Mandatory reporting has had an impact.

Additional Response to Consumer Recommendations

In addition to the above delineated points, great effort has been made to access consumer recommendations that impact public safety and welfare. Consumers have been

invited yearly to attend the Board's Summit meeting. Because attendance at this function has been minimal, other avenues are being explored to assure consumer input through advisory councils on matters of research, economics, marketing, etc. Of prime interest is involving consumers in decision-making regarding workforce issues.

Since the completion of the study, internal processes have been changed to assure that licensees coming from other states are evaluated against Alabama standards. Those who do not meet the standards are proposed a remedial course of action. If this cannot be met, licensure is denied.

To address concerns about new licensees' knowledge, the Board mandated a four-hour CE course for nurses licensed by examination on or after October 1, 2002. This occurred due to increasing complaints involving newly licensed nurses. One hour of the four-hour course is devoted to chemical dependency. Most nursing education programs do not have a separate course on chemical dependency. The "Standards of Practice" are also addressed including the licensees' responsibility and accountability for maintaining competence.

Another area focused on pharmacology of advanced practice nurses. The pain management study evidenced that a great percentage of advanced practice nurses did not feel adequately prepared to prescribe controlled substances. This information led to a change in the regulations that require six contact hours of pharmacology specifically for advanced practice nurses: Certified Registered Nurse Practitioners (CRNP), Certified Nurse Midwives (CNM), and Certified Registered Nurse Anesthetists (CRNA). This was implemented in the 2004 renewal cycle.

Conclusion

Previous research on nursing competence has primarily focused on opinions by licensees. This study, however, focused on consumers perspectives on competence of nurses. Findings have been used as evidence to promote change in regulations intended to enhance public protection. Factoring in consumers' perspectives into policy decision-making has enriched the potential for meeting the public's expectations.

Future directions of regulatory agencies will be impacted, as ever, by public affairs and the public's needs. The purpose of regulatory agencies is expected to hold fast to the higher principle of public trust and public good – meeting the social contract provide for by the Constitution of the United States.

Regulatory agencies such as Boards of Nursing have a responsibility to meet, and accountability to be paid to the government and the people by fulfilling their legally authorized scope of authority. This means establishing standards of practice that are current to the times, advancing with the challenges of the times, investing in the resources that facilitate assurances of competencies for those authorized under the Board's jurisdiction to practice, and holding accountable those entrusted with implementing the standards of practice.

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Appendix A. Alabama Board of Nursing Assumptions for Accountability Model: 1998

There is a professional and ethical responsibility to make every effort to assure public protection as statutorily authorized.

There is a need to clarify benchmarks of competence and to refine the standards of practice.

A model for measuring competence in practice will include expected outcomes that exceed the continuing education model. The competence model will include evidence of quality assurance and improvement using the APPLE model (Administratively feasible, publicly credible; professionally acceptable; legally defensible and economically affordable. (NCSBN, 1998). While continuing education has, through research, been evidenced as contributing to competence, continuing education as an individual entity does not assure competency.

The contributions of continuing education to competence have been delineated in a variety of studies among different professions (Umble & Cervaro, 1997). Other studies have questioned its value and declare that there is no conclusive evidence of value. Even so, judicial decisions show that continuing education is a considered to be a component in competence. (Mann[Lazarus], et al., 1998]

No universal system has been accepted for determining those factors critical to public protection, but there is a professional obligation to assure competence and to set standards.

A profile of the competent nurse can be assembled and used to facilitate model development through systematic and rigorous study of populations with vested interest.

Appendix B. Demographic Variables of Consumers Study Sample (N = 600)

Variable	Frequency	Percentage
Gender		
Male	284	48
Female	316	52
Age		
18-24	43	7
25-44	229	38
45-64	210	35
65 and over	114	19
NA	4	7
Education		
Some high School	84	14
High School Graduate	174	29
Some College	179	30
College Graduate	94	16
Graduate/Professional	69	11
Race		
Black	116	19
Caucasian	462	77
Other	19	3
NA	3	<1

The study population consisted of 284 males, 316 females between the ages of 18-65+, with at least a minimum of some high school education. The racial mix was comprised of 462 Caucasians, 116 blacks, 19 "other" and 3 undesignated. In the survey, the proportion for the black population is slightly lowers (19% vs. 22%) than the Alabama average. This can be explained by the lower incidence of black households having a telephone.

Appendix C. Demographic Variables Licensees (N = 467)

Variable	Frequency	Percentage
Gender		
Male	21	4.5
Female	442	95.5
No Response	4	0.9
Age		
20-30	69	14.8
31-40	135	28.9
41-50	158	33.8
51-60	76	16.3
61-70	19	4.1
> 70	1	0.2
No Response	9	1.9
Education (Highest Level)		
Diploma	25	5.4
Certificate	173	37.0
Associate Degree	138	29.6
Bachelors (BSN)	74	15.8
Masters (MSN/MN)	18	3.9
Bachelors (other)	14	3.0
Masters (Other)	10	2.1
Doctoral Nursing	2	0.4
Doctoral (Other)	4	0.9
Educ. Specialist	2	0.4
No Response	7	1.5
Race		
Caucasian	375	80.3
African American	74	15.8
Hispanic	1	.2
Native American	6	1.3
Other	2	.4
Refused	5	1.1
Asian	2	.4
No Response	2	.4

Appendix D. Demographic Variables Educator Participants (N=34)

Variable	Frequency	Percentage
Gender		
Male	2	5.9
Female	32	94.1
Age		
31-40	2	2.9
41-50	18	52.9
51-60	11	32.4
61-70	4	11.8
Education		
MSN	17	50.0
Masters other	2	5.9
Doctoral Nursing	8	23.5
Doctoral other	6	17.6
No response	1	2.9
Race		
Caucasian	25	73.5
African American	7	20.6
Refused	1	2.9
No Response	1	2.9

Appendix E. Demographic Variables Organizational Leaders (N = 30)

Variable	Frequency	Percentage
Gender		
Male	3	10.0
Female	27	90.0
Age		
20-30	2	6.7
31-40	2	6.7
41-50	14	46.7
51-60	9	30.0
61-70	3	10.0
Education		
Certificate/diploma/LPN	2	6.7
Associate degree	1	3.3
BSN	2	6.7
MSN	13	43.3
Bachelors Degree other	3	10.0
Masters Degree other	3	10.0
Doctors Degree Nursing	2	6.7
Doctors Degree other	2	6.7
Other higher degree	2	6.7
Race		
Caucasian	24	80.0
African American	5	16.7
No Response	3	3.3